



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

DOCKET NO. 50-206

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 155
License No. DPR-13

1. The U.S. Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for amendment by Southern California Edison Company (the licensee) and the San Diego Gas and Electric Company dated May 12, 1993, and supplemented by letters dated June 30, and November 23, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission regulations and all applicable requirements have been satisfied.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment, paragraph 2.C.(2) of Facility Operating License No. DPR-13 is hereby amended, and the addition of a new paragraph 2.C.(9) to Facility Operating License No. DPR-13 to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 155, are hereby incorporated in the license. Southern California Edison Company shall operate the facility in accordance with the Technical Specifications.

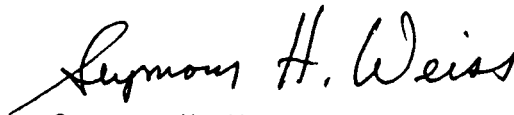
(9) Fire Protection

The licensee shall implement and maintain in effect all provisions of the SONGS 1 Fire Protection Program approved in Safety Evaluation Reports dated July 19, 1979, February 4, 1981, June 27, 1986, and April 8, 1987, as described in the Updated Fire Hazards Analysis (UFHA), originally submitted February 11, 1985, and periodically revised thereafter, subject to the following provisions:

The licensee may make changes to the SONGS 1 Fire Protection Program without prior approval of the Commission only if those changes would not adversely affect the ability to maintain the fuel in the spent fuel pool in a safe condition in the event of a fire, or increase the likelihood of a significant offsite release of radioactive material due to a fire.

3. This license amendment is effective as of the date of its issuance and must be fully implemented no later than 120 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Seymour H. Weiss, Director
Non-Power Reactors and Decommissioning
Project Directorate
Division of Operating Reactor Support
Office of Nuclear Reactor Regulation

Enclosure:
Appendix A Technical
Specifications

Date of Issuance: December 28, 1993

ENCLOSURE TO LICENSE AMENDMENT NO. 155

FACILITY OPERATING LICENSE NO. DPR-13

DOCKET NO. 50-206

The Appendix A Technical Specifications have been revised in their entirety. The previous Technical Specifications pages should be removed and replaced by the enclosed pages of the Permanently Defueled Technical Specifications.

PERMANENTLY DEFUELED TECHNICAL SPECIFICATIONS

LIST OF EFFECTIVE PAGES

<u>Page</u>	<u>Amendment No.</u>	<u>Page</u>	<u>Amendment No.</u>	<u>Page</u>	<u>Amendment No.</u>
D-i		D6.5-7			
D-ii		D6.6-1			
D-iii		D6.7-1			
D-iv		D6.8-1			
D-v		D6.8-2			
D1.0-1		D6.8-3			
D1.0-2		D6.9-1			
D1.0-3		D6.9-2			
D1.0-4		D6.10-1			
D2.1-1		D6.10-2			
D3.0-1		D6.11-1			
D3.0-2		D6.12-1			
D3.1-1		D6.12-2			
D3.1-2		D6.13-1			
D3.1-3		D6.14-1			
D3.1-4		D6.15-1			
D3.1-5		D6.15-2			
D3.2-1		D6.15-3			
D3.2-2		D6.15-4			
D3.3-1					
D4.0-1					
D4.0-2					
D4.0-3					
D4.1-1					
D4.1-2					
D4.2-1					
D4.3-1					
D4.3-2					
D5.1-1					
D5.1-2					
D5.2-1					
D6.1-1					
D6.2-1					
D6.2-2					
D6.2-3					
D6.2-4					
D6.3-1					
D6.4-1					
D6.5-1					
D6.5-2					
D6.5-3					
D6.5-4					
D6.5-5					
D6.5-6					

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1
PERMANENTLY DEFUELED TECHNICAL SPECIFICATIONS

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
<u>SECTION D1 INTRODUCTION</u>	
D1.0 DEFINITIONS	D1.0-1
<u>SECTION D2 SAFETY LIMITS</u>	
D2.1 FUEL STORAGE FACILITY	D2.1-1
<u>SECTION D3 LIMITING CONDITIONS FOR OPERATION</u>	
D3.0 LIMITING CONDITIONS FOR OPERATION (GENERAL)	D3.0-1
D3.1 SPENT FUEL POOL	D3.1-1
D3.1.1 Spent Fuel Pool Temperature	D3.1-1
D3.1.2 Spent Fuel Pool Water Level	D3.1-3
D3.1.3 Spent Fuel Pool Water Chemistry	D3.1-4
D3.2 AUXILIARY FEEDWATER STORAGE TANK	D3.2-1
D3.3 FUEL STORAGE BUILDING LOAD HANDLING LIMIT	D3.3-1
<u>SECTION D4 SURVEILLANCE REQUIREMENTS</u>	
D4.0 SURVEILLANCE REQUIREMENTS (GENERAL)	D4.0-1
D4.1 SPENT FUEL POOL	D4.1-1
D4.2 AUXILIARY FEEDWATER STORAGE TANK	D4.2-1
D4.3 MISCELLANEOUS RADIOACTIVE MATERIAL SOURCES	D4.3-1
<u>SECTION D5 DESIGN FEATURES</u>	
D5.1 SITE DESCRIPTION	D5.1-1
D5.2 SPENT FUEL STORAGE FACILITY	D5.2-1

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1
PERMANENTLY DEFUELED TECHNICAL SPECIFICATIONS

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
<u>SECTION D6 ADMINISTRATIVE CONTROLS</u>	
D6.1 RESPONSIBILITY	D6.1-1
D6.2 ORGANIZATION	D6.2-1
D6.2.1 Offsite and Onsite Organizations	D6.2-1
D6.2.2 Unit Staff	D6.2-1
D6.3 UNIT STAFF QUALIFICATIONS	D6.3-1
D6.4 TRAINING	D6.4-1
D6.5 REVIEW AND AUDIT	D6.5-1
D6.5.1 Onsite Review Committee (OSRC)	D6.5-1
D6.5.2 Technical Review and Control	D6.5-3
D6.5.3 Nuclear Safety Group (NSG)	D6.5-5
D6.6 REPORTABLE EVENT ACTION	D6.6-1
D6.7 SAFETY LIMIT VIOLATION	D6.7-1
D6.8 PROCEDURES AND PROGRAMS	D6.8-1
D6.9 REPORTING REQUIREMENTS	D6.9-1
D6.9.1 Routine Reports	D6.9-1
D6.9.2 Special Reports	D6.9-2
D6.10 RECORD RETENTION	D6.10-1
D6.11 RADIATION PROTECTION PROGRAM	D6.11-1
D6.12 HIGH RADIATION AREA	D6.12-1
D6.13 PROCESS CONTROL PROGRAM (PCP)	D6.13-1
D6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)	D6.14-1
D6.15 ENVIRONMENTAL PROTECTION	D6.15-1

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1
PERMANENTLY DEFUELED TECHNICAL SPECIFICATIONS

FIGURES

<u>FIGURE</u>	<u>TITLE</u>	<u>PAGE</u>
D5.1-1	Exclusion Area	D5.1-2

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1
PERMANENTLY DEFUELED TECHNICAL SPECIFICATIONS

TABLES

<u>TABLE</u>	<u>TITLE</u>	<u>PAGE</u>
D1.0-1	Surveillance Frequency Notation	D1.0-4
D3.1.3-1	Spent Fuel Pool Water Chemistry	D3.1-5
D4.1-1	Minimum Spent Fuel Pool Equipment and Parameter Checks and Sampling Frequency	D4.1-2
D6.2-1	Minimum Shift Crew Composition	D6.2-4

D1 INTRODUCTION

D1.0 DEFINITIONS

The defined terms of this section appear in capitalized type and are applicable throughout the Technical Specifications.

ACTION

ACTION shall be that part of a Specification which prescribes remedial measures required under designated conditions.

FREQUENCY NOTATION

The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table D1.0-1.

FUEL HANDLING OPERATIONS

FUEL HANDLING OPERATIONS shall be the movement of fuel over or within the spent fuel pool. Suspension of FUEL HANDLING OPERATIONS shall not preclude completion of the movement of fuel to a safe conservative position.

FUNCTIONAL

A FUNCTIONAL system, subsystem, train, component, or device is capable of performing its specified function(s) and is maintained in accordance with good engineering and maintenance practices for commercial grade equipment.

MEMBER(S) OF THE PUBLIC

MEMBER(S) OF THE PUBLIC shall include all individuals who by virtue of their occupational status have no formal association with the plant. This category shall include non-employees of the licensee who are permitted to use portions of the site for recreational, occupational, or other purposes not associated with plant functions. This category shall not include non-employees such as vending machine servicemen or postmen who, as a part of their formal job function, occasionally enter an area that is controlled by the licensee for the purposes of protection of individuals from exposure to radiation and radioactive materials.

OFFSITE DOSE CALCULATION MANUAL

The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses due to radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring Alarm/Trip Setpoints, and in the conduct of the Radiological Environmental Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section D6.8.4 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications D6.9.1.3 and D6.9.1.4.

OPERABLE-OPERABILITY

A system, subsystem, train, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s), and when all necessary attendant instrumentation, controls, electrical power, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its function(s) are also capable of performing their related support function(s).

PERMANENTLY DEFUELED MODE

The plant is in a PERMANENTLY DEFUELED MODE when all fuel has been removed from the reactor building and fuel is stored in the spent fuel pool.

PROCESS CONTROL PROGRAM

The PROCESS CONTROL PROGRAM (PCP) shall contain the current formulas, sampling, analyses, tests, and determinations to be made to ensure that processing and packaging of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR Parts 20, 61, and 71, State regulations, burial ground requirements, and other requirements governing the disposal of solid radioactive waste.

REPORTABLE EVENT

A REPORTABLE EVENT shall be any of those conditions specified in Section 50.73 to 10 CFR Part 50.

SITE BOUNDARY

The SITE BOUNDARY shall be that line beyond which the land is not owned, leased, or otherwise controlled by the licensee.

SPENT FUEL POOL COOLING TRAIN

A SPENT FUEL POOL COOLING (SFPC) TRAIN shall be a train of components that includes: either SFPC pump aligned with the spent fuel pool heat exchanger, one component cooling water (CCW) pump aligned with the spent fuel pool heat exchanger and with either CCW heat exchanger, and either salt water cooling pump aligned with the same CCW heat exchanger. All SFPC TRAIN components and structures are classified as quality class non-safety related except for the safety-related components and structures which are necessary to maintain the spent fuel pool pressure boundary.

UNRESTRICTED AREA

An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials or any area within the SITE BOUNDARY used for residential quarters or industrial, commercial, institutional, and/or recreational purposes.

TABLE D1.0-1

SURVEILLANCE FREQUENCY NOTATION

<u>NOTATION</u>	<u>FREQUENCY</u>
S	At least once per 12 hours.
D	At least once per 24 hours.
W	At least once per 7 days.
M	At least once per 31 days.
Q	At least once per 92 days.
SA	At least once per 184 days.
A	At least once per 366 days.
18M	At least once per 18 months.
N/A	Not applicable.

D2 SAFETY LIMITS

D2.1 FUEL STORAGE FACILITY

APPLICABILITY: Whenever fuel assemblies are in the spent fuel pool (SFP).

OBJECTIVE: To protect the integrity of physical barriers which guard against uncontrolled release of radioactivity from spent fuel assemblies stored in the SFP.

SPECIFICATION: The water level in the SFP shall be maintained above plant elevation 16 feet.

BASIS: The fuel cladding must be protected to guard against the uncontrolled release of radioactivity. This is achieved by ensuring the stored fuel is covered with water at all times. In this condition, the SFP water temperature is thermodynamically limited since the fuel storage building is maintained near standard atmospheric conditions and critical heat flux conditions cannot occur. A SFP water level safety limit of plant elevation 16 feet ensures that water completely covers the stored fuel. This safety limit provides acceptable margin to fuel uncover since the top of the stored fuel assemblies is at approximately plant elevation 15 feet 1 inch (Reference 1). Reference elevation is sea level, mean lower low water. The thermodynamic limit on SFP water temperature also ensures that the stresses in the SFP liner and concrete are acceptable (References 2 and 3).

REFERENCES:

1. SCE Design Calculation No. DC-3321, "Spent Fuel Pool Connections Evaluation," August 28, 1991.
2. SCE Design Calculation No. DC-3775, "Fuel Storage Building - Spent Fuel Pool Wall Thermal Analysis," April 21, 1993.
3. SCE Design Calculation No. DC-3777, "Fuel Storage Building - Spent Fuel Pool Liner Plate Thermal Analysis," May 21, 1993.

D3 LIMITING CONDITIONS FOR OPERATION

D3.0 LIMITING CONDITIONS FOR OPERATION (GENERAL)

APPLICABILITY: Applies to the operational requirements to be implemented when specific actions are not identified within individual Limiting Conditions for Operation.

OBJECTIVE: To ensure that the station is placed in a safe condition when circumstances arise which are not identified within individual Limiting Conditions for Operation.

SPECIFICATIONS: D3.0.1 Compliance with the Limiting Conditions for Operation contained in the succeeding Specifications is required during the PERMANENTLY DEFUELED MODE or other conditions specified therein; except that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met.

D3.0.2 Noncompliance with a Specification shall exist when the requirements of the Limiting Condition for Operation and associated ACTION requirements are not met within the specified time intervals. If the Limiting Condition for Operation is restored prior to expiration of the specified time intervals, completion of the ACTION requirements is not required.

BASIS: Specification D3.0.1 and D3.0.2 establish the general requirements applicable to Limiting Conditions for Operation. Even though the facility is not an operating nuclear reactor, these requirements are based on the requirements for Limiting Conditions for Operation stated in the Code of Federal Regulations, 10 CFR 50.36(c)(2):

"Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation...is not met, the licensee shall...follow any remedial action permitted by the technical specification until the condition can be met."

Specification D3.0.1 establishes the Applicability statement within each individual specification as the requirement for when (i.e., in the PERMANENTLY DEFUELED MODE or other specified conditions) conformance to the Limiting Conditions for Operation is required for safe operation of the facility. The ACTION requirements establish those remedial measures that must be taken within specified time limits when the requirements of a Limiting Condition for Operation are not met.

There are two basic types of ACTION requirements. The first specifies the remedial measures that permit continued operation of the facility which is not further restricted by the time limits of the ACTION requirements. In this case, conformance to the ACTION requirements provides an acceptable level of safety for unlimited continued operation as long as the ACTION requirements continue to be met. The second type of ACTION requirement specifies a time limit in which conformance to the conditions of the Limiting Condition for Operation must be met. This time limit is the allowable outage time to restore an inoperable system or component to OPERABLE status or for restoring parameters within specified limits. If these actions are not completed within the allowable outage time limits, the facility is to be placed in a condition in which the specification no longer applies.

The specified time limits of the ACTION requirements are applicable from the point in time it is identified that a Limiting Condition for Operation is not met. The time limits of the ACTION requirements are also applicable when a system or component is removed from service for surveillance testing or investigation of operational problems. Individual specifications may include a specified time limit for the completion of a Surveillance Requirement when equipment is removed from service. In this case, the allowable outage time limits of the ACTION requirements are applicable when this limit expires if the surveillance has not been completed.

Specification D3.0.2 establishes that noncompliance with a specification exists when the requirements of the Limiting Condition for Operation are not met and the associated ACTION requirements have not been implemented within the specified time interval. The purpose of this specification is to clarify that (1) implementation of the ACTION requirements within the specified time interval constitutes compliance with a specification and (2) completion of the remedial measures of the ACTION requirements is not required when compliance with a Limiting Condition for Operation is restored within the time interval specified in the associated ACTION requirements.

D3.1 SPENT FUEL POOL

D3.1.1 SPENT FUEL POOL TEMPERATURE

APPLICABILITY: PERMANENTLY DEFUELED MODE

OBJECTIVE: To ensure adequate cooling of irradiated fuel assemblies stored in the spent fuel pool (SFP).

SPECIFICATIONS:

- A. The SFP coolant temperature shall be maintained less than 150°F.
- B. At least one SPENT FUEL POOL COOLING (SFPC) TRAIN shall be FUNCTIONAL*.

ACTIONS:

- A. If the SFP coolant temperature reaches 150°F, initiate corrective action within one hour to restore the temperature below 150°F.
- B. With no FUNCTIONAL SFPC TRAIN, suspend FUEL HANDLING OPERATIONS and initiate action within one hour to return a SFPC TRAIN to FUNCTIONAL status prior to the SFP coolant temperature reaching 150°F.

BASIS: The purpose of the SFPC system is, in part, to provide adequate cooling for irradiated fuel assemblies stored in the SFP. The SFPC system is designed to maintain the SFP coolant temperature below 150°F for the maximum normal heat load case and below boiling for the maximum abnormal heat load case. The calculated maximum normal and maximum abnormal heat loads for SONGS 1 are 6.5 MBtu/hr and 17.0 MBtu/hr, respectively. Both of these heat load cases were calculated in accordance with the recommendations of Standard Review Plan, Section 9.1.3, "Spent Fuel Pool Cooling and Cleanup System," and Branch Technical Position ASB 9-2, "Residual Decay Energy for Light-Water Reactors for Long-Term Cooling." The design of the SFPC system was accepted by the NRC in References 1, 2, and 3.

This specification is based on the 150°F design requirement associated with the maximum normal heat load case, even though the heat load in the SFP during the PERMANENTLY DEFUELED MODE is less than that calculated for the maximum normal heat load case. The SFP heat load for the PERMANENTLY DEFUELED MODE was the greatest when the defueling was first completed (being a maximum of approximately 4.3 MBtu/hr) and is decreasing with time as the fuel continues to cool.

*A FUNCTIONAL SFPC TRAIN is capable of performing its cooling function and is maintained with commercial grade spare parts in those portions of the cooling systems which are not part of the SFP pressure boundary. The SFP pressure boundary shall be maintained as quality class safety-related and seismic category A to ensure the SFP water inventory is reliably preserved.

The impact of losing SFPC during the PERMANENTLY DEFUELED MODE has also been evaluated (Reference 4). The SFP heat load is sufficiently low during the PERMANENTLY DEFUELED MODE so that a minimum of 65 hours would be required for the SFP temperature to reach 150°F if cooling were lost after August, 1993. This is sufficient time to place a SFPC TRAIN in service. A non-powered means of determining SFP water temperature is provided so that water temperature can be surveilled even if electrical power is unavailable.

If cooling were interrupted without restoration, the SFP could be cooled through passive means by opening the fuel storage building rollup and personnel access doors. The temperature of the SFP would not exceed 180°F if such action became necessary after August, 1993. Since the stored spent fuel could be cooled by passive means, the use of commercial grade spare parts to maintain the portions of the SFPC TRAINS which are not part of the SFP pressure boundary is permissible. The SFPC TRAIN components and structures which are part of the SFP pressure boundary are classified as quality class safety-related and seismic category A to ensure that the required SFP water inventory is reliably maintained.

REFERENCES:

1. Letter, W. Paulson (NRC) to R. Dietch (SCE), "Systematic Evaluation Program Topic IX-1, Fuel Storage - San Onofre Nuclear Generating Station, Unit 1," December 7, 1982.
2. Letter, T. M. Novack (NRC) to K. P. Baskin (SCE), "San Onofre Nuclear Generating Station, Unit 1, Long Term Service Seismic Reevaluation Program," July 11, 1986.
3. Letter, J. E. Tatum (NRC) to Harold B. Ray (SCE), "Issuance of Amendment No. 132 to Provisional Operating License, San Onofre Nuclear Generating Station, Unit No. 1 (TAC No. 76808)," July 16, 1990.
4. SCE Design Calculation No. DC-3769, Revision 1, "Natural Cooling of the Unit 1 Spent Fuel Pool," May 24, 1993.

D3.1.2 SPENT FUEL POOL WATER LEVEL

APPLICABILITY: PERMANENTLY DEFUELED MODE

OBJECTIVE: To ensure adequate cooling of irradiated fuel assemblies stored in the spent fuel pool (SFP) and to limit radiological dose rates above the SFP water surface during FUEL HANDLING OPERATIONS and periods of irradiated fuel storage.

SPECIFICATION: Water shall be maintained in the SFP to an elevation not less than 40 feet 3 inches.

ACTION: With the above specification not satisfied, place fuel assemblies in a safe condition, suspend FUEL HANDLING OPERATIONS, and initiate action within one hour to restore the SFP water level to within its limit.

BASIS: Requiring a minimum water level in the SFP of plant elevation 40 feet 3 inches ensures that (1) at least 23 feet of water would be available to remove 99% of the iodine gas activity assumed to be released in the event of a dropped and damaged fuel assembly, and (2) there would be at least ten feet of water above the top of a withdrawn fuel assembly so as to limit dose rates at the top of the water in accordance with Section 15.17 of the SONGS 1 Updated Final Safety Analysis Report. Indication of SFP water level is provided by local, non-powered means. Reference elevation is sea level, mean lower low water.

D3.1.3 SPENT FUEL POOL WATER CHEMISTRY

APPLICABILITY: PERMANENTLY DEFUELED MODE

OBJECTIVE: To protect against potential fuel assembly, storage rack, and spent fuel pool (SFP) liner degradation effects during long-term storage of irradiated fuel in the SFP.

SPECIFICATION: The SFP water chemistry shall be maintained within the limits specified in Table D3.1.3-1.

ACTION: With a water chemistry limit(s) exceeded, initiate action within 72 hours to restore the water chemistry to within the limit(s).

BASIS: Maintaining the SFP water chemistry within appropriate limits protects against potential fuel assembly, storage rack, and SFP liner degradation effects during long-term storage of spent fuel. The limits that are included in Table D3.1.3-1 conform to the chemistry requirements for SFP water that are specified in Westinghouse NSSS Standard Information Package 5-1, "Chemistry Criteria and Specifications," Revision 4, dated August, 1985. The stored fuel assemblies, storage racks, and pool liner all contain stainless steel which may be susceptible to localized corrosion in the presence of chloride or fluoride ions. The limits specified in Table D3.1.3-1 have been established to minimize localized corrosion and reduce the potential for failures due to stress corrosion.

TABLE D3.1.3-1

SPENT FUEL POOL WATER CHEMISTRY

<u>PARAMETER</u>	<u>LIMIT (ppm)</u>
Chloride	≤0.15
Fluoride	≤0.15

D3.2 AUXILIARY FEEDWATER STORAGE TANK

APPLICABILITY: PERMANENTLY DEFUELED MODE

OBJECTIVE: To ensure the availability of water in the auxiliary feedwater storage tank (AFWST) so that the spent fuel pool (SFP) level requirements in Specification D3.1.2 can be satisfied during periods of fuel handling and storage as well as during accident conditions.

SPECIFICATION: The AFWST shall be OPERABLE with a minimum required water level of plant elevation 50 feet 9 inches.

ACTION: With the AFWST inoperable, restore the tank to OPERABLE status within 14 days, or initiate action within one hour to place an equivalent seismically qualified source of water in OPERABLE status.

BASIS: The purpose of the AFWST during the PERMANENTLY DEFUELED MODE is to serve as a seismically qualified source of makeup water for the SFP. The thermal conditions in the SFP during the PERMANENTLY DEFUELED MODE have been conservatively calculated (Reference 1) in accordance with the recommendations of Standard Review Plan, Section 9.1.3, "Spent Fuel Pool Cooling and Cleanup System," and Branch Technical Position ASB 9-2, "Residual Decay Energy for Light-Water Reactors for Long-Term Cooling." The analysis demonstrates that the heat load in the SFP is sufficiently low during the PERMANENTLY DEFUELED MODE so as to preclude pool boiling even if SFP cooling were discontinued.

Maintaining the AFWST water level above plant elevation 50 feet 9 inches ensures that at least 50,000 gallons of water can be gravity fed to the SFP at a flow rate of at least 12 gpm (Reference 2). The SFP evaporation rate would be less than 4.1 gpm if SFP cooling were interrupted after August, 1993. Therefore, the 50,000 gallons of usable water in the AFWST represents over a five day supply of makeup water for the SFP. Five days is sufficient time to either restore cooling or connect another water source to the SFP to ensure the SFP minimum water level required by Specification D3.1.2 is maintained. Reference elevation is sea level, mean lower low water. Surveillance of the AFWST water level is performed locally, using non-powered means, if control room indication is unavailable.

The 14 day allowed outage time for the AFWST allows for maintenance activities on the tank. Also, this period is sufficiently brief so as to minimize the probability of a seismic event from damaging the two alternate sources of makeup water (the primary plant makeup water tank and the service water reservoir) when the AFWST is out of service. Neither of the alternate water sources are seismically qualified.

By August, 1993, even if SFP cooling and makeup remained unavailable, over 24 days would be required for the SFP water level to drop within 10 feet of the top of the stored fuel. Ten feet of water above the fuel provides adequate shielding for periods of fuel storage (fuel handling operations are prohibited unless the stored fuel is covered by at least 23 feet of water). Therefore, sufficient time is available to perform corrective actions and return the SFP water level to plant elevation 40 feet 3 inches as required by Specification D3.1.2.

REFERENCES:

1. SCE Design Calculation No. DC-3769, Revision 1, "Natural Cooling of the Unit 1 Spent Fuel Pool," May 24, 1993.
2. SCE Design Calculation No. DC-3783, "Makeup Water for Unit 1 Spent Fuel Pool," March 13, 1993.

D3.3 FUEL STORAGE BUILDING LOAD HANDLING LIMIT

APPLICABILITY: PERMANENTLY DEFUELED MODE

OBJECTIVE: To prevent incidents during FUEL HANDLING OPERATIONS that could affect public health and safety.

SPECIFICATION: Loads in excess of 1,500 pounds shall be prohibited from travel over fuel assemblies in the spent fuel pool (SFP).

ACTION: With the above requirement not met, remove the load from the area over the stored spent fuel assemblies and place the load in a safe position.

BASIS: The restriction on the movement of loads in excess of 1,500 pounds (i.e., the nominal weight of a fuel assembly, rod cluster control assembly, and associated handling tool) over fuel assemblies in the SFP ensures that in the event this load is dropped, (1) the activity release will be limited to that contained in a single fuel assembly, and (2) any possible distortion of fuel in the storage racks will not result in a critical array.

D4 SURVEILLANCE REQUIREMENTS

D4.0 SURVEILLANCE REQUIREMENTS (GENERAL)

APPLICABILITY: Applies to the surveillance requirements to be implemented in these specifications.

OBJECTIVE: To define the conditions under which the surveillance requirements of Section D4 Specifications are applicable.

SPECIFICATIONS:

D4.0.1 Surveillance Requirements shall be met during the PERMANENTLY DEFUELED MODE or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

D4.0.2 Each Surveillance Requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25% of the specified surveillance interval.

D4.0.3 Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification D4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours. Surveillance Requirements do not have to be performed on inoperable equipment.

D4.0.4 Entry into a specified condition (e.g., FUEL HANDLING OPERATIONS) shall not occur unless all Surveillance Requirement(s) associated with the Limiting Conditions for Operation have been performed within the applicable surveillance interval or as otherwise specified. This provision shall not prevent passage through, or to, conditions as required to comply with ACTION requirements.

BASIS:

Specifications D4.0.1 through D4.0.4 establish the general requirements applicable to Surveillance Requirements. These requirements are based on the Surveillance Requirements stated in the Code of Federal Regulations, 10 CFR 50.36(c)(3):

"Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within the safety limits, and that the limiting conditions of operation will be met."

Specification D4.0.1 establishes the requirement that surveillances must be performed during the PERMANENTLY DEFUELED MODE or other conditions for which the requirements of the Limiting Conditions for Operation apply unless otherwise stated in an individual Surveillance Requirement. The purpose of

this specification is to ensure that surveillances are performed to verify the operational status of systems and components and that parameters are within specified limits to ensure safe operation of the facility when the plant is in the PERMANENTLY DEFUELED MODE or other specified condition for which the associated Limiting Conditions for Operation are applicable. Surveillance Requirements do not have to be performed when the facility is in a condition for which the requirements of the associated Limiting Condition for Operation do not apply unless otherwise specified.

Specification D4.0.2 establishes the limit for which the specified time interval for Surveillance Requirements may be extended. It permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operating conditions that may not be suitable for conducting the surveillance; e.g., transient conditions or other ongoing surveillance or maintenance activities. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond those specified. The limitation of Specification D4.0.2 is based on engineering judgment and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the Surveillance Requirements. This provision is sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

Specification D4.0.3 establishes the failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification D4.0.2, as a condition that constitutes a failure to meet the OPERABILITY requirements for a Limiting Condition for Operation. Under the provisions of this specification, systems and components are assumed to be OPERABLE when Surveillance Requirements have been satisfactorily performed within the specified time interval. However, nothing in this provision is to be construed as implying that systems or components are OPERABLE when they are found or known to be inoperable although still meeting the Surveillance Requirements. This specification also clarifies that the ACTION requirements are applicable when Surveillance Requirements have not been completed within the allowed surveillance interval and that the time limits of the ACTION requirements apply from the point in time it is identified that a surveillance has not been performed and not at the time that the allowed surveillance interval was exceeded. Completion of the Surveillance Requirement within the allowable outage time limits of the ACTION requirements restores compliance with the requirements of Specification D4.0.3. However, this does not negate the fact that the failure to have performed the surveillance within the allowed surveillance interval, defined by the provisions of Specification D4.0.2, was a violation of the OPERABILITY requirements of a Limiting Condition for Operation that is subject to enforcement action. Further, the failure to perform a surveillance within the provisions of Specification D4.0.2 is a violation of a Technical Specification requirement and is, therefore, a reportable event under the requirements of 10 CFR 50.73(a)(2)(i)(B) because it is a condition prohibited by the plant's Technical Specifications.

If the allowable outage time limits of the ACTION requirements are less than 24 hours, a 24-hour allowance is provided to permit a delay in implementing

the ACTION requirements. This provides an adequate time limit to complete Surveillance Requirements that have not been performed. The purpose of this allowance is to permit the completion of a surveillance before other remedial measures would be required that may preclude completion of a surveillance. The basis for this allowance includes consideration for plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, and the safety significance of the delay in completing the required surveillance. If a surveillance is not completed within the 24-hour allowance, the time limits of the ACTION requirements are applicable at that time. When a surveillance is performed within the 24-hour allowance and the Surveillance Requirements are not met, the time limits of the ACTION requirements are applicable at the time that the surveillance is terminated.

Surveillance Requirements do not have to be performed on inoperable equipment because the ACTION requirements define the remedial measures that apply. However, the Surveillance Requirements have to be met to demonstrate that inoperable equipment has been restored to OPERABLE status.

Specification D4.0.4 ensures that system and component OPERABILITY requirements or parameter limits are met before entry into the condition for which these systems and components ensure safe operation of the facility.

D4.1 SPENT FUEL POOL

APPLICABILITY: Applies to the systems, components, and parameters that are directly related to the storage of irradiated fuel assemblies in the spent fuel pool (SFP) during the PERMANENTLY DEFUELED MODE.

OBJECTIVE: To specify the minimum frequency and type of surveillance to be applied to plant systems, components, and parameters which directly support storage of irradiated fuel assemblies in the SFP.

SPECIFICATION: Equipment and parameter sampling checks shall be performed as specified in Table D4.1-1.

BASIS: Performance of the equipment and parameter checks at the frequencies specified in Table D4.1-1 is sufficient to ensure the safe, long-term storage of irradiated fuel in the SFP.

TABLE D4.1-1

MINIMUM SPENT FUEL POOL EQUIPMENT AND
PARAMETER CHECKS AND SAMPLING FREQUENCIES

<u>EQUIPMENT/PARAMETER</u>	<u>CHECKS</u>	<u>FREQUENCY</u>
1. Spent Fuel Pool (SFP) Coolant Temperature	Verify temperature is less than 150°F in accordance with Specification D3.1.1.A.	D
2. SFP Water Level	Verify level is not less than plant elevation 40 feet 3 inches in accordance with Specification D3.1.2.	D
3. SFP Water Chemistry	Verify water chemistry is within the following limits of Specification D3.1.3:	M
	<u>Parameter</u> <u>Limit (ppm)</u>	
	Chloride \leq 0.15	
	Fluoride \leq 0.15	

D4.2 AUXILIARY FEEDWATER STORAGE TANK

APPLICABILITY: Applies to the auxiliary feedwater storage tank (AFWST) during the PERMANENTLY DEFUELED MODE.

OBJECTIVE: To ensure the availability of makeup water for the spent fuel pool (SFP).

SPECIFICATION: The AFWST shall be demonstrated OPERABLE at least once per 7 days by verifying the water level in the tank is above plant elevation 50 feet 9 inches.

BASIS: This surveillance ensures an adequate supply of water will be available during the PERMANENTLY DEFUELED MODE to replenish the SFP, as necessary, to maintain the water level above plant elevation 40 feet 3 inches as required by Specification D3.1.2. Maintaining the tank water level above plant elevation 50 feet 9 inches ensures at least 50,000 gallons of water can be fed by gravity into the SFP at a flow rate of at least 12 gpm. This water volume and flow capability are adequate to provide over five days worth of makeup water to the SFP (see Basis for Specification D3.2). Surveillance of the AFWST water level is accomplished by local, non-powered means if control room indication is unavailable.

D4.3 MISCELLANEOUS RADIOACTIVE MATERIAL SOURCES

APPLICABILITY: Applies to the leakage of radioactive source materials during the PERMANENTLY DEFUELED MODE.

OBJECTIVE: To verify the physical integrity of portable and fixed radioactive calibration sources.

SPECIFICATIONS: A. Byproduct material sealed sources which exceed the quantities listed in 10 CFR 30.71, Schedule B, and all other sealed sources containing greater than 0.1 microcuries shall be leak tested in accordance with Specifications B, C, and D below.

Exception: Notwithstanding the periodic leak test required by this specification, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.

B. Each sealed source containing radioactive material, other than Hydrogen 3, with a half life greater than thirty days and in any form other than gas, shall be tested for leakage and/or contamination prior to use out of storage and prior to transfer to another person and thereafter at intervals not to exceed six months. This test does not apply to sealed sources that are stored and not in use.

C. The leakage test shall be capable of detecting the presence of 0.005 microcuries of radioactive material. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate.

D. If testing reveals the presence of 0.005 microcuries or more of removable contamination, it shall immediately be withdrawn from use, decontaminated, and repaired, or disposed of in accordance with applicable regulatory requirements and reported in the subsequent annual report filed pursuant to Specification D6.9.1.1.

BASIS: This Specification ensures that leakage from radioactive material sources does not exceed allowable total body or organ limits. In the unlikely event that those quantities of radioactive byproduct materials of interest to this Specification which are exempt from leakage testing are ingested or inhaled, they represent less than one maximum permissible body burden for total body irradiation. The limits for all other sources (including alpha emitters) are based upon 10 CFR 70.39(c) limits for plutonium.

Sealed sources which are continuously enclosed within a shielded mechanism (i.e., sealed sources within radiation monitoring or boron measuring devices) are considered to be stored and need not be tested unless they are removed from the shielded mechanism.

D5 DESIGN FEATURES

D5.1 SITE DESCRIPTION

The San Onofre Nuclear Generating Station is located on the West Coast of Southern California in San Diego County, about 62 miles southeast of Los Angeles and about 51 miles northwest of San Diego. The site is located within the U.S. Marine Corps Base, Camp Pendleton, California. The site is about 4,500 feet long and 800 feet wide, comprising 84 acres. Unit 1 occupies approximately 16 acres while Units 2 and 3 occupy 52 acres, including 27.7 acres for the power block and site switchyard and 25.1 acres for parking, access area, and miscellaneous structures. Units 2 and 3 are located southeast of, and immediately adjacent to, Unit 1.

The minimum distance to the boundary of the exclusion area, as defined in 10 CFR 100.3, shall be 283.5 meters from the outer edge of the Unit 1 containment sphere. For the purpose of dose assessment, a slightly reduced distance of 282 meters defined by the discontinuous line in Figure D5.1-1 is assumed.

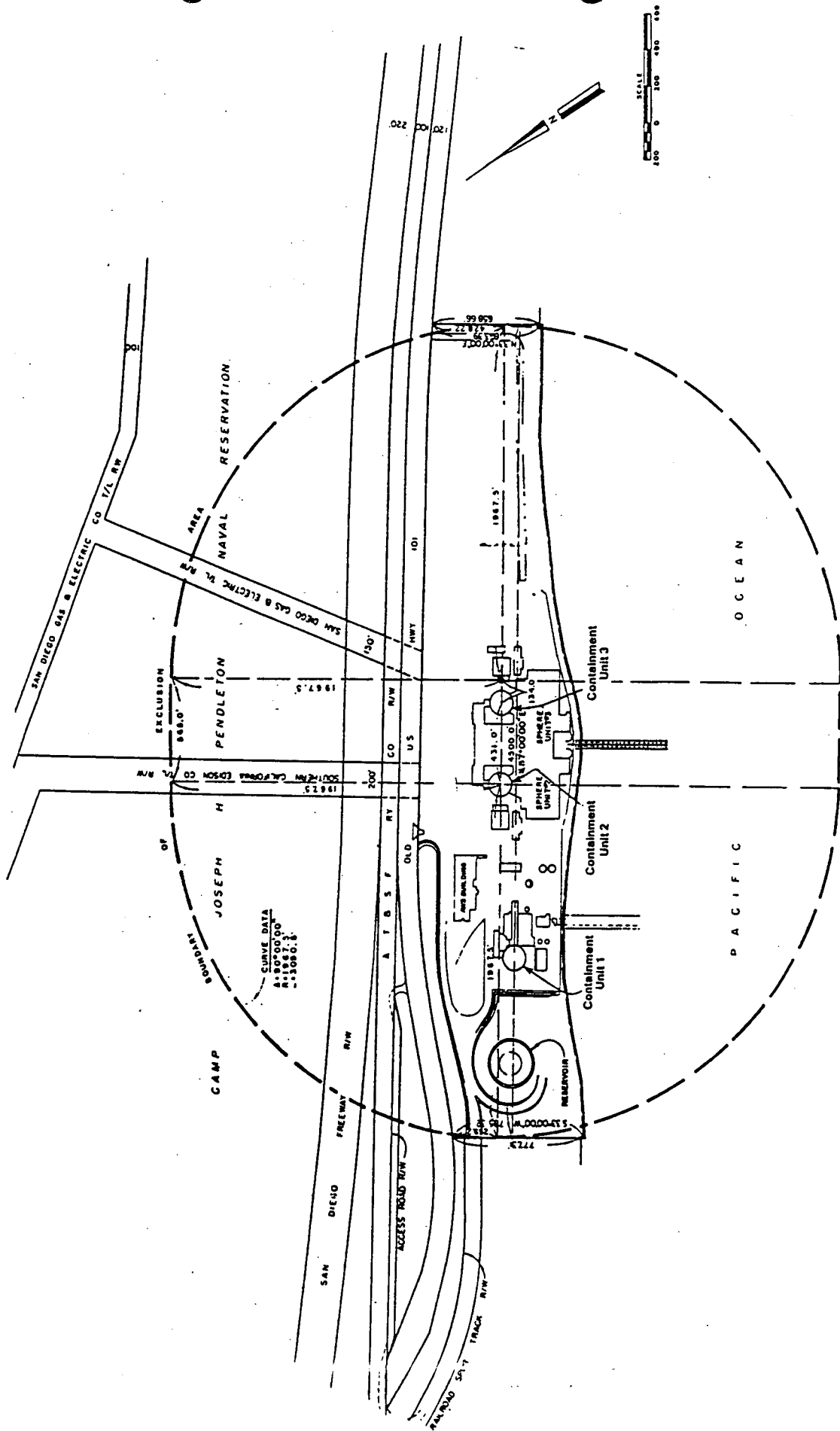


FIGURE D5.1-1
EXCLUSION AREA

D5.2 SPENT FUEL STORAGE FACILITY

Spent fuel is stored under water in storage racks in the spent fuel pool (SFP) which is located in the fuel storage building. The SFP storage racks provide storage for 216 spent fuel assemblies which is sufficient to accommodate one and one-third reactor cores. The SFP is constructed of reinforced concrete and is lined with stainless steel. A leak chase system exists for monitoring leakage from the SFP liner. The fuel storage building, SFP, spent fuel storage racks, and SFP liner are classified as seismic category A.

The spent fuel storage racks are free standing on the floor and are supported horizontally by the walls of the SFP. Each spent fuel assembly is stored in an individual storage compartment that is accessible only through the open top of the compartment. The storage racks have cross bars which span the spaces between fuel locations to physically prevent a fuel assembly from being inserted in other than design locations. The fuel storage compartments are located on 20-inch centers with 12 inches between fuel assemblies. The separation between the spent fuel assemblies is sufficient to maintain $K_{eff} < 0.95$ with unborated water in the SFP and with fresh fuel assemblies having 4.0 weight per cent enrichment of U-235.

D6 ADMINISTRATIVE CONTROLS

D6.1 RESPONSIBILITY

- D6.1.1 The Vice President and Site Manager, Nuclear Generation Site shall be responsible for overall management of the plant and ensuring the safe storage and handling of irradiated fuel, and all site support functions. He shall delegate in writing the succession to this responsibility in his absence.
- D6.1.2 The Shift Supervisor (or during his absence from the Control Room Area,* a designated individual) shall be responsible for the Control Room command function. A management directive to this effect, signed by the Vice President and Site Manager, Nuclear Generation Site shall be reissued to all site/station personnel on an annual basis.
- D6.1.3 Any emergency action which departs from a License Condition or Technical Specification, as permitted by 10 CFR 50.54(x), shall be approved, as a minimum, by a Certified Fuel Handler prior to taking the action.

* "Control Room Area" is defined as the area interior to the control room entry doors.

D6.2 ORGANIZATION

OFFSITE AND ONSITE ORGANIZATION

- D6.2.1 Onsite and offsite organizations shall be established for plant management and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safe storage and handling of irradiated fuel.
- a. Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all organization positions involved with the safe storage and handling of irradiated fuel. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the FSAR.
 - b. The Station Manager shall be responsible for overall unit safety and shall have control over those onsite activities necessary for the safe storage and handling of irradiated fuel.
 - c. The Senior Vice President, and the Vice President and Site Manager, Nuclear Generation Site shall have corporate responsibility for overall plant nuclear safety. The Vice President and Site Manager, Nuclear Generation Site shall take any measures needed to ensure acceptable performance of the staff in the safe storage and handling of irradiated fuel. The Senior Vice President shall take any measures needed to ensure acceptable performance of the staff in providing technical support to the plant to ensure the safe storage and handling of irradiated fuel.
 - d. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

UNIT STAFF

- D6.2.2 a. Each on-duty shift shall be composed of at least the minimum shift crew composition shown in Table D6.2-1.

- b. At least one individual qualified to stand watch in the Control Room (a Shutdown Control Room Operator or a Certified Fuel Handler) shall be in the Control Room Area* when fuel is in the spent fuel pool, unless Unit 2 or 3 post-accident conditions allow only intermittent manning of the Control Room. The requirements for transfer of the Control Room Command Function contained in Specification D6.1.2 and Table D6.2-1 are not applicable if the Control Room is manned intermittently.
- c. A health physics technician shall be on-site when fuel is in the spent fuel pool. A health physics technician normally assigned to Units 2 and 3 may fulfill this function.
- d. All FUEL HANDLING OPERATIONS shall be observed and directly supervised by a Certified Fuel Handler who has no other concurrent duties during this operation.
- e. Administrative Procedures shall be developed and implemented to limit the working hours of unit staff who perform safety functions (e.g., Operators responsible for the safe storage and handling of irradiated fuel, health physicists, and key maintenance personnel).

Adequate shift coverage shall be maintained without routine heavy use of overtime. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during major maintenance or major plant modifications, on a temporary basis, the following guidelines shall be followed:

- 1) An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;
- 2) An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 24** hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;
- 3) A break of at least 8 hours should be allowed between work periods, including shift turnover time.

Any deviation from the above guidelines shall be authorized by the Station Manager, or designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

* "Control Room Area" is defined as the area interior to the control room entry doors.

** Personnel regularly assigned to 12 hour shifts may work up to 26 hours in a 48 hour period.

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Station Manager, or designee, to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

- f. The Plant Superintendent (at time of appointment) shall be a Certified Fuel Handler or shall have previously held an SRO license for the unit.

TABLE D6.2-1

MINIMUM SHIFT CREW COMPOSITION

POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION
SS	1
SCRO	1

SS - Shift Supervisor who is a Certified Fuel Handler

SCRO - Shutdown Control Room Operator, non-certified

Except for the person filling the Control Room Command function, the shift crew composition may be one less than the minimum requirements of Table D6.2-1 for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table D6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

During any absence of the Shift Supervisor from the Control Room Area* an individual who is either a Certified Fuel Handler or non-certified Shutdown Control Room Operator shall be designated to assume the Control Room Command function.

* "Control Room Area" is defined as the area interior to the control room entry doors.

D6.3 UNIT STAFF QUALIFICATIONS

- D6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971, "Selection and Training of Personnel for Nuclear Power Plants," for comparable positions, except that the Plant Superintendent need not hold a Senior Reactor Operator's license at the time of appointment, and except for the Manager, Health Physics, who shall meet or exceed the minimum qualifications of Regulatory Guide 1.8, September, 1975.

D6.4 TRAINING

- D6.4.1 A retraining and replacement training program under the direction of the Manager, Nuclear Training, for the unit staff shall be maintained and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 (except for retraining topic 1 in Section 5.5.1), and shall include familiarization with relevant industry operational experience. An NRC approved program shall be used for the training and retraining of Certified Fuel Handlers. Following initial NRC approval of the program, proposed changes to the program shall be submitted for NRC approval if required by 10 CFR 50.59.

D6.5 REVIEW AND AUDIT

D6.5.1 ONSITE REVIEW COMMITTEE (OSRC)

FUNCTION

D6.5.1.1 The Onsite Review Committee (OSRC) shall function to advise the Station Manager on all matters related to nuclear safety.

COMPOSITION

D6.5.1.2 The Onsite Review Committee shall be composed of the:

Chairman:	Station Manager
Member:	Manager, Operations
Member:	Manager, Technical
Member:	Plant Superintendent Unit 1
Member:	Manager, Health Physics
Member:	Manager, Chemistry
Member:	Manager, Maintenance
Member:	San Diego Gas & Electric Representative, Senior Engineer*

ALTERNATES

D6.5.1.3 All alternate members shall be appointed in writing by the OSRC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in OSRC activities at any one time.

MEETING FREQUENCY

D6.5.1.4 The OSRC shall meet at least once per calendar month and as convened by the OSRC Chairman or his designated alternate. The Chairman may decrease the frequency of the OSRC meetings to a minimum of once per six months if warranted by a decrease in activity in the unit.

QUORUM

D6.5.1.5 The minimum quorum of the OSRC necessary for the performance of the OSRC responsibility and authority provisions of these Technical Specifications shall consist of the Chairman or his designated alternate and four members including alternates.

* BS degree in Engineering or Physical Science plus at least four years professional level experience in his field. At least one of the four years experience shall be nuclear power plant experience.

RESPONSIBILITIES

D6.5.1.6 The Onsite Review Committee shall be responsible for:

- a. Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence to the Nuclear Safety Group (NSG).
- b. Review of all REPORTABLE EVENTS.
- c. Review of irradiated fuel storage and handling, and radioactive waste operations to detect potential nuclear safety hazards.
- d. Performance of special reviews, investigations or analyses and reports thereon as requested by the Station Manager or the NSG Supervisor.

AUTHORITY

D6.5.1.7 The Onsite Review Committee (OSRC) shall:

- a. Render determinations in writing with regard to whether or not items considered under D6.5.1.6.a above constitute unreviewed safety questions.
- b. Provide written notification within 24 hours to the Vice President and Site Manager, Nuclear Generation Site and the NSG Supervisor of disagreement between the OSRC and the Station Manager; however, the Vice President and Site Manager, Nuclear Generation Site, shall have responsibility for resolution of such disagreements pursuant to D6.1.1 above.

RECORDS

D6.5.1.8 The Onsite Review Committee shall maintain written minutes of each OSRC meeting that, at a minimum, document the results of all OSRC activities performed under the responsibility and authority provisions of these Technical Specifications. Copies shall be provided to the Nuclear Safety Group Supervisor.

D6.5.2 TECHNICAL REVIEW AND CONTROL

ACTIVITIES

- D6.5.2.1 The Vice President and Site Manager, Nuclear Generation Site, shall assure that each procedure and program required by Specification D6.8 and other procedures which affect nuclear safety, and changes thereto, is prepared by a qualified individual/organization. Each such procedure, and changes thereto, shall be reviewed by an individual/group other than the individual/group which prepared the procedure, or changes thereto, but who may be from the same organization as the individual/group which prepared the procedure, or changes thereto. Documentation of these activities shall be provided to the NSG Supervisor.
- D6.5.2.2 Proposed changes to the Technical Specifications shall be prepared by a qualified individual/organization. The preparation of each proposed Technical Specifications change shall be reviewed by an individual/group other than the individual/group which prepared the proposed change, but who may be from the same organization as the individual/group which prepared the proposed change. Proposed changes to the Technical Specifications shall be approved by the Station Manager. Documentation of these activities shall be provided to the Vice President and Site Manager, Nuclear Generation Site, and to the NSG Supervisor.
- D6.5.2.3 Proposed modifications to unit nuclear safety-related structures, systems and components required to be operational for the safe storage and handling of irradiated fuel shall be designed by a qualified individual/organization. Each such modification shall be reviewed by an individual/group other than the individual/group which designed the modification, but who may be from the same organization as the individual/group which designed the modification. Proposed modifications to nuclear safety-related structures, systems and components required to be operational for the safe storage and handling of irradiated fuel shall be approved prior to implementation by the Station Manager; or by the Manager, Technical as previously designated by the Vice President and Site Manager, Nuclear Generation Site. Documentation of these activities shall be provided to the Vice President and Site Manager, Nuclear Generation Site, and to the NSG Supervisor.
- D6.5.2.4 Individuals responsible for reviews performed in accordance with D6.5.2.1, D6.5.2.2 and D6.5.2.3 shall be members of the nuclear division management staff, previously designated by the Vice President and Site Manager, Nuclear Generation Site, to perform such reviews. Each such review shall include a determination of whether or not additional, cross-disciplinary review is necessary and a verification that the proposed actions do not constitute an unreviewed safety question. If deemed necessary, such review shall be performed by the appropriate designated review personnel.

- D6.5.2.5 Proposed tests and experiments which affect station nuclear safety and are not addressed in the FSAR or Technical Specifications shall be reviewed by the Station Manager, or members of the nuclear division management staff as previously designated by the Vice President and Site Manager, Nuclear Generation Site. Documentation of these activities shall be provided to the Vice President and Site Manager, Nuclear Generation Site, and the NSG Supervisor.
- D6.5.2.6 The Site Security Plan, and implementing procedures shall be reviewed at least once per 12 months. Recommended changes to the Site Security Plan shall be approved by the Vice President and Site Manager, Nuclear Generation Site, and transmitted to the NSG Supervisor; implementing procedures shall be prepared and approved in accordance with Specification D6.8.
- D6.5.2.7 The Site Emergency Plan, and implementing procedures, shall be reviewed at least once per 12 months. Recommended changes to the Site Emergency Plan shall be approved by the Vice President and Site Manager, Nuclear Generation Site, and transmitted to the NSG Supervisor; implementing procedures shall be prepared and approved in accordance with Specification D6.8.
- D6.5.2.8 The Station Manager shall assure the performance of a review by a qualified individual/organization of every uncontrolled or unplanned release of radioactive material to the environs including the preparation and forwarding of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence to the Vice President and Site Manager, Nuclear Generation Site, to the NSG Supervisor, and to the Station Manager.
- D6.5.2.9 The Station Manager shall assure the performance of a review by a qualified individual/organization and may designate the approval of changes to the PROCESS CONTROL PROGRAM, OFFSITE DOSE CALCULATION MANUAL, and radwaste treatment systems. Documentation of these activities shall be provided to the Vice President and Site Manager, Nuclear Generation Site, to the NSG Supervisor, and to the Station Manager.
- D6.5.2.10 Documentation of each of the activities performed under Specifications D6.5.2.1 through D6.5.2.9 shall be maintained in accordance with Specification D6.10.

D6.5.3 NUCLEAR SAFETY GROUP (NSG)

FUNCTION

- D6.5.3.1 The Nuclear Safety Group shall function to provide independent review and audit of designated activities in the areas of:
- a. Nuclear engineering
 - b. Chemistry and radiochemistry
 - c. Metallurgy
 - d. Instrumentation and control
 - e. Radiological safety
 - f. Mechanical and electrical engineering
 - g. Quality assurance practices

COMPOSITION

- D6.5.3.2 The NSG shall consist of a Supervisor and at least three staff specialists. The Supervisor shall have a Bachelor's Degree in Engineering or Physical Science and a minimum of 6 years of professional level managerial experience in the power field. Each staff specialist shall have a Bachelor's Degree in Engineering or Physical Science and a minimum of 5 years of professional level experience in the field of his specialty.

The NSG shall use specialists from other technical organizations to augment its expertise in the disciplines of D6.5.3.1. Such specialists shall meet the same qualification requirements as the NSG members.

CONSULTANTS

- D6.5.3.3 Consultants shall be utilized as determined by the NSG Supervisor to provide expert advice to the NSG.

RESPONSIBILITIES

- D6.5.3.4 The NSG shall review:
- a. The safety evaluations for (1) changes to procedures required by Specification D6.8, equipment or systems and (2) tests or experiments completed under the provision of Section 50.59, 10 CFR, to verify that such actions did not constitute an unreviewed safety question.

- b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.
- c. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.
- d. Proposed changes to Technical Specifications or this Operating (Possession Only) License.
- e. Violations of codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
- f. ALL REPORTABLE EVENTS.
- g. All recognized indications of an unanticipated deficiency in some aspect of design or operation of safety-related structures, systems or components that are required to be operational for the safe storage and handling of irradiated fuel.
- h. Reports and meeting minutes of the Onsite Review Committee.

AUDIT

- D6.5.3.5 Audits of unit activities shall be performed under the cognizance of the NSG. These audits shall encompass:
- a. The conformance of irradiated fuel storage and handling operations to the provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.
 - b. The performance, training and qualifications of the entire unit staff at least once per 12 months.
 - c. The results of the actions taken to correct deficiencies occurring in safety-related structures, systems, or components that are required to be operational for the safe storage and handling of irradiated fuel, or in their method of operation, at least once per 12 months.
 - d. The performance of the activities required by the Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once per 24 months.
 - e. Any other area considered appropriate by the Nuclear Safety Group Supervisor or the Vice President and Site Manager, Nuclear Generation Site.

- f. The Fire Protection Program and implementing procedures at least once per 24 months.
- g. An independent fire protection and loss prevention inspection and audit shall be performed annually utilizing either qualified offsite licensee personnel or an outside fire protection firm.
- h. An inspection and audit of the fire protection and loss prevention program shall be performed by a qualified outside fire consultant at intervals no greater than 36 months.

AUTHORITY

D6.5.3.6 The NSG shall report to and advise offsite organization management on those areas of responsibility specified in Sections D6.5.3.4 and D6.5.3.5.

RECORDS

D6.5.3.7 Records of NSG activities shall be prepared and maintained. Reports of reviews and audits shall be distributed monthly to the Vice President and Site Manager, Nuclear Generation Site, and to the management positions responsible for the areas audited.

D6.6 REPORTABLE EVENT ACTION

D6.6.1 The following action shall be taken for REPORTABLE EVENTS:

- a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73, 10 CFR Part 50, and
- b. Each REPORTABLE EVENT shall be reviewed by the OSRC, and the results of this review shall be submitted to the Vice President and Site Manager, Nuclear Generation Site and to the NSG Supervisor.

D6.7 SAFETY LIMIT VIOLATION

D6.7.1 The following actions shall be taken in the event a Safety Limit is violated.

- a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within one hour. The Vice President and Site Manager, Nuclear Generation Site, and the NSG Supervisor shall be notified within 24 hours.
- b. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the OSRC. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) corrective action taken to prevent recurrence.
- c. The Safety Limit Violation Report shall be submitted to the Commission, the Vice President and Site Manager, Nuclear Generation Site, and the NSG within 14 days of the violation.

D6.8 PROCEDURES AND PROGRAMS

- D6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:
- a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February, 1978.
 - b. Fuel handling operations.
 - c. Surveillance and test activities of safety-related equipment required to be operational for the safe storage and handling of irradiated fuel.
 - d. Security Plan implementation.
 - e. Emergency Plan implementation.
 - f. Fire Protection Program implementation.
 - g. PROCESS CONTROL PROGRAM implementation.
 - h. OFFSITE DOSE CALCULATION MANUAL implementation.
 - i. Quality Assurance Program for effluent and environmental monitoring, using the guidance in Regulatory Guide 4.15, Revision 1, February, 1979.
 - j. "Nuclear Plant Fire Protection Functional Responsibilities, Administrative Controls and Quality Assurance," June 14, 1977, as specified in Section 6 of the Fire Protection Safety Evaluation Report dated July 19, 1979.
- D6.8.2 Each procedure of D6.8.1 above, and changes thereto, shall be approved by the Vice President and Site Manager, Nuclear Generation Site; or by the Station Manager; or by the responsible Nuclear Division Manager; or by their designees as previously designated by the Vice President and Site Manager, Nuclear Generation Site, prior to implementation and shall be reviewed periodically as set forth in administrative procedures.
- D6.8.3 Temporary changes to the procedures of D6.8.1 above may be made provided:
- a. The intent of the original procedure is not altered.

- b. The change is approved by two members of the nuclear division management staff exercising responsibility in the specific area and unit or units addressed by the change, at least one of whom is a Certified Fuel Handler.
- c. The change is documented, reviewed and approved by responsible nuclear division management staff, as designated in accordance with D6.8.2 above, within 14 days of implementation.

D6.8.4 The following programs shall be established, implemented, and maintained:

a. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- 1) Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;
- 2) Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR Part 20, Appendix B, Table II, Column 2;
- 3) Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.106 and with the methodology and parameters in the ODCM;
- 4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50;
- 5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year, respectively, in accordance with the methodology and parameters in the ODCM at least every 31 days;
- 6) Limitations on the operability and use of the liquid effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day

period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50;

- 7) Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the doses associated with 10 CFR Part 20, Appendix B, Table II, Column 1;
- 8) Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50;
- 9) Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radioactive nuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50;
- 10) Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

b. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radio-nuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

- 1) Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM,
- 2) A Land Uses Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and
- 3) Participation in an Interlaboratory Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

D6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

D6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the U. S. Nuclear Regulatory Commission, Attention: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator of the Regional Office of the NRC, unless otherwise noted.

ANNUAL REPORTS*

D6.9.1.1 Annual reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year.

D6.9.1.2 Reports required on an annual basis shall include a tabulation of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions**, e.g., operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and fuel handling). The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20 percent of the individual total dose need not be accounted for. In the aggregate, at least 80 percent of the total whole body dose received from external sources shall be assigned to specific major work functions.

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT***

D6.9.1.3 The Annual Radiological Environmental Operating Report covering the previous calendar year shall be submitted before May 1 of each year. The report shall include summaries, interpretation, and analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

* A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

** This tabulation supplements the requirements of 10 CFR 20.407.

*** A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT*

D6.9.1.4 Routine radioactive effluent release reports covering the previous calendar year shall be submitted before May 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents released from the unit. The report shall also include a summary of the quantities of solid radioactive waste shipped from the unit directly to the disposal site and the quantities of solid radioactive waste shipped from the unit's intermediary processor to the disposal site. The material provided shall be (1) consistent with the objectives outlines in the ODCM and PCP and (2) in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR Part 50.

SPECIAL REPORTS

D6.9.2 Special reports shall be submitted to the U.S. Nuclear Regulatory Commission, Attention: Document Control Desk, Washington D.C. 20555 with a copy to the Regional Administrator of the Regional Office of the NRC, within the time period specified for each report.

* A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

D6.10 RECORD RETENTION

In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated.

D6.10.1 The following records shall be retained for at least five years:

- a. Records and logs of unit operation until the unit was permanently shut down, covering time interval at each power level.
- b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.
- c. All REPORTABLE EVENTS submitted to the Commission.
- d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.
- e. Records of changes made to the procedures required by Specification D6.8.1.
- f. Records of radioactive shipments.
- g. Records of sealed source and fission detector leak tests and results.
- h. Records of annual physical inventory of all sealed source material of record.
- i. Records and logs of fuel storage activities and fuel handling operations.

D6.10.2 The following records shall be retained for the duration of the Operating (Possession Only) License:

- a. Record and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report.
- b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
- c. Records of radiation exposure for all individuals entering radiation control areas.
- d. Records of gaseous and liquid radioactive material released to the environs.

- e. Records of transient or operational cycles for those unit components designed for a limited number of transients or cycles.
- f. Records of reactor tests and experiments*.
- g. Records of training and qualification for current members of the unit staff.
- h. Records of in-service inspections performed pursuant to these Technical Specifications*.
- i. Records of Quality Assurance activities not included in D6.10.1 that are required by the QA Manual.
- j. Records of reviews performed for changes made to procedures or equipment or reviews or tests and experiments pursuant to 10 CFR 50.59.
- k. Records of OSRC meetings and NSG reports.
- l. Records of the service lives of all safety related hydraulic and mechanical snubbers including the date at which the service life commences and associated installation and maintenance records*.
- m. Records of secondary water sampling and water quality*.
- n. Records of review performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.

* Although no new records of this type are expected following permanent plant shutdown and defueling, previously generated records shall be retained in accordance with D6.10.2.

D6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR 20 and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

D6.12 HIGH RADIATION AREA

D6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Exposure Permit (REP)*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the areas and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Exposure Permit.

D6.12.2 In addition to the requirements of D6.12.1, areas accessible to personnel with radiation levels such that a major portion of the body could receive in one hour a dose greater than 1000 mrem shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved REP which shall specify the dose rate levels in the immediate work area and the maximum allowable stay time for individuals in that area. For individual areas accessible to personnel with radiation levels such that a major portion of the body could receive in one hour a dose in excess of 1000 mrem** that are located within large areas, such as PWR containment, where no

* Health Physics personnel or personnel escorted by Health Physics personnel shall be exempt from the REP issuance requirement during the performance of their assigned radiation protection duties, provided they are otherwise following approved plant radiation protection procedures for entry into high radiation areas.

** Measurement made at 18" from source of radioactivity.

enclosure exists for purposes of locking, and no enclosure can be reasonably constructed around the individual areas, then that area shall be roped off, conspicuously posted, and unless a health physics technician is in continuous attendance, a flashing light shall be activated as a warning device. In lieu of the stay time specification of the REP, direct or remote (such as use of closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities within the area.

D6.13 PROCESS CONTROL PROGRAM

D6.13.1 The Process Control Program (PCP) shall be approved by the Commission prior to implementation.

D6.13.2 Licensee-initiated changes to the PCP:

1. Shall be documented and records of reviews performed shall be retained as required by Specification D6.10.2.
 - a. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the changes(s);
 - b. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations; and
 - c. Documentation of the fact that the change has been reviewed and found acceptable pursuant to D6.5.2.
2. Shall become effective upon review and approval pursuant to D6.5.2 by the Station Manager.

D6.14 OFFSITE DOSE CALCULATION MANUAL

D6.14.1 The Offsite Dose Calculation Manual (ODCM) shall be approved by the Commission prior to implementation.

D6.14.2 Licensee-initiated changes to the ODCM:

1. Shall be submitted to the Commission in the Annual Radioactive Effluent Release Report for the period in which the change(s) was made effective. This submittal shall contain:
 - a. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the changes(s);
 - b. A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.106, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations; and
 - c. Documentation of the fact that the change has been reviewed and found acceptable pursuant to D6.5.2.
2. Shall become effective upon review and approval pursuant to D6.5.2 by the Station Manager.
3. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (month/year) the change was implemented.

D6.15 ENVIRONMENTAL PROTECTION

FACILITY DESIGN AND OPERATION

D6.15.1 This section contains a description of facility design features and operating practices which, if changed, could have a significant effect on environmental impact. Any significant change in facility design features or operating practices described here must be reported to the NRC in accordance with the provisions of Section D6.15.2.a prior to the change.

Sections D6.15.1.a and D6.15.1.b describe the normal operation of the circulating water system. Following permanent plant shutdown and defueling, operation of the circulating water system may continue intermittently for several months during the draining of various plant systems to facilitate compliance with the liquid effluent discharge limits specified in the ODCM. Upon completion of systems dewatering, no further operation of the circulating water system is anticipated. However, short term operation of the circulating water system may subsequently be required due to unforeseen circumstances.

a. Intake System

The circulating water system, under normal operating conditions, draws water from the ocean at a point approximately 3,200 feet offshore. The ocean bottom at this point is approximately 27 feet below mean lower low-water level. The intake structure rests on a foundation located 33 feet beneath the ocean bottom and rises vertically to a point 10 1/2 feet above the ocean floor. The inside horizontal dimensions of the intake structure are 16 to 21 feet. A velocity cap, 1-foot thick, rests on eight columns above the top of the intake structure. The top surface of the velocity cap is 15 1/2 feet above the ocean bottom and 11 1/2 feet below mean lower low-water.

A 12-foot ID reinforced concrete conduit is connected horizontally to the shoreward side of the intake structure. This conduit is buried beneath the ocean bottom, with a minimum of 4 feet of sand cover over its top and 4 feet of rock cover surrounding the intake structure. All sand cover was placed so as to approximate the local ocean bottom profile.

Water entering the top of the intake structure is accelerated to a design velocity of about 2.5 feet per second and directed into a 12-foot ID reinforced concrete conduit. As the water enters the concrete conduit from the structure, it is accelerated to a design velocity of 6.9 feet per second. The circulating water system is designed to deliver 350,000 gpm at this velocity.

The offshore system joins the onshore portion of the circulating water system at the screenwell. The screenwell is located just inside the seawall on the Station property.

Water entering the onshore system passes, through a coarse bar screen, through finer traveling screens, and proceeds to two circulating water pumps designed to operate at 175,000 gpm. Water entering the screenwell structure is decelerated so that the approach velocity at the screens is approximately 2.0 feet per second.

Traveling and bar screens are provided to remove marine growth and debris from the seawater passing through the screenwell. The materials removed from the seawater are marine growth, shells, fish, driftwood, and other debris present in the ocean. The traveling screens and bar screens are placed in series, perpendicular to the flow. The screens are cleaned automatically, with the frequency of cleaning being dependent on the rate of material buildup on the screens. The bar screens are cleaned by a traveling mechanical rake that deposits accumulated debris, by means of a seawater jet spray washing process, into sluiceways for removal. The traveling screens are motor driven, and are capable of rotating as a unit in continuous sequence when activated by pressure differential due to trash buildup. The debris picked up by the traveling screens is also deposited in a sluiceway by means of a seawater jet spray.

b. Discharge System

Water leaves the condenser and is discharged to the ocean through a 12-foot ID 2,600-foot-long concrete conduit. A single point discharge is effected through a discharge structure located in 24 feet of water. The dimension of the structure is the same as the intake; however, there is no velocity cap. The top of the discharge structure is about 11.5 feet below mean lower low-water.

A 12-foot ID reinforced concrete conduit is connected horizontally to the shoreward side of the discharge structure. This conduit is buried beneath the ocean bottom, with a minimum

of 4 feet of sand cover over its top and 4 feet of rock surrounding the discharge structure. All sand and rock cover was placed so as to approximate the local ocean bottom profile.

The water travels through the discharge conduit with a design velocity of 6.9 feet per second and exits with a vertical velocity of about 2.5 feet per second. The vertical orientation creates a single orifice jet diffuser which entrains surrounding water and assists in rapid diffusion of the discharge water. About seven minutes is required for water to travel from the condensers to the end of the discharge.

REPORTS

D6.15.2 The following reports shall be submitted pursuant to Specification D6.9.2.

- a. A report shall be made to the NRC prior to implementation of a change in plant design, in plant operation, or in procedures described in Section D6.15.1 if the change would have a significant adverse effect on the environment or involves an environmental matter or question not previously reviewed and evaluated by the NRC. The report shall include a description and evaluation of the change and a supporting benefit-cost analysis.

- b. Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to station activities shall be recorded and promptly reported to the NRC within 24 hours followed by a written report within 30 days. No routine monitoring programs are required to implement this condition.

The written report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

Events reportable under this subsection which also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided a copy of such report at the same time it is submitted to the other agency.

The following are examples of unusual or important events: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973; unusual fish kills; increase in nuisance organisms or conditions; and unanticipated or emergency discharge of waste water or chemical substances.

c. Reporting Related to the NPDES Permits and State Certifications

Violations of the NPDES Permit or State certification (pursuant to Section 401 of the Clean Water Act) shall be reported to the NRC by submittal of copies of the reports required by the NPDES Permit or certification. The licensee shall also provide the NRC with a copy of the results of the following studies at the same time they are submitted to the permitting agency:

Section 316(b) Demonstration Study

Changes and additions to the NPDES Permit or the State certification shall be reported to the NRC within 30 days following the date the change is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

The NRC shall be notified of changes to the effective NPDES Permit proposed by the licensee by providing NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. The licensee shall provide the NRC a copy of the application for renewal of the NPDES Permit at the same time the application is submitted to the permitting agency.

The staff has determined the following based on its review of the licensee proposal to omit this section of the SONGS 1 Technical Specifications from the PDTS. The current surveillance requirements applied to the inservice inspection requirements are not necessary for either the safe operation or maintenance of SONGS 1, because the SONGS 1 reactor is permanently defueled. The removal of specifications no longer necessary for safe operation or maintenance of SONGS 1 is appropriate to reduce complexity of the SONGS 1 Technical Specifications. Therefore, the staff finds this proposed change acceptable.

4.8 Reactor Anomalies

The purpose of this section of the SONGS 1 Technical Specifications is to require an evaluation of any reactivity anomalies that occur within the reactor.

The licensee proposes to omit the current surveillance requirements applied to the reactivity anomalies from the PDTS. The licensee justification for not including this specification in the PDTS is that the SONGS 1 reactor is permanently defueled thus precluding any reactivity anomalies from occurring.

The staff has determined the following based on its review of the licensee proposal to omit this section of the SONGS 1 Technical Specifications from the PDTS. The current surveillance requirements applied to the reactivity anomalies are not necessary for either the safe operation or maintenance of SONGS 1, because the SONGS 1 reactor is permanently defueled. The removal of specifications no longer necessary for safe operation or maintenance of SONGS 1 is appropriate to reduce complexity of the SONGS 1 Technical Specifications. Therefore, the staff finds this proposed change acceptable.

4.9 Reactor Vessel Surveillance Program

The purpose of this section of the SONGS 1 Technical Specifications is to require monitoring the effect of radiation on the reactor vessel core region material.

The licensee proposes to omit the current surveillance requirements applied to the reactor vessel surveillance program from the PDTS. The licensee justification for not including this technical specification in the PDTS is that the SONGS 1 reactor is permanently defueled thus making the monitoring of the effect of radiation on the reactor core region material unnecessary.

The staff has determined the following based on its review of the licensee proposal to omit this section of the SONGS 1 Technical Specifications from the PDTS. The current surveillance requirements applied to the reactor vessel surveillance program are not necessary for the safe maintenance of SONGS 1 because the SONGS 1 reactor is permanently defueled. The removal of specifications no longer necessary for either the safe operation or maintenance of SONGS 1 is appropriate to reduce complexity of the SONGS 1 Technical Specifications. Therefore, the staff finds this proposed change acceptable.

4.10 Augmented Inservice Inspection of High Energy Lines Outside Containment

The purpose of this section of the SONGS 1 Technical Specifications is to provide assurance of the continued integrity of piping systems over the service lifetime of those piping systems.

The licensee proposes to omit the current surveillance requirements applied to the augmented inservice inspection of high energy lines outside containment from the PDTS. The licensee justification for not including this specification in the PDTS is that the SONGS 1 reactor is permanently defueled thus removing the high energy lines outside of containment from operation.

The staff has determined the following based on its review of the licensee proposal to omit this section of the SONGS 1 Technical Specifications from the PDTS. The current surveillance requirements applied to the augmented inservice inspection of high energy lines outside containment are not necessary for either the safe operation or maintenance of SONGS 1, because the SONGS 1 reactor is permanently defueled and these lines will no longer contain high energy fluids. The removal of specifications no longer necessary for safe operation or maintenance of SONGS 1 is appropriate to reduce complexity of the SONGS 1 Technical Specifications. Therefore, the staff finds this proposed change acceptable.

4.11 Control Room Emergency Air Treatment System

The purpose of this section of the SONGS 1 Technical Specifications is to ensure that the control room emergency air treatment system will operate effectively, if required.

The licensee proposes to omit the current surveillance requirements applied to the control room emergency air treatment system from the PDTS. The licensee justification for not including this specification in the PDTS is that this system will not be performing a safety-related function during the Permanently Defueled Mode. In addition, the licensee has committed to maintain this system functional as commercial grade equipment during the Permanently Defueled Mode, in accordance with administrative controls.

The staff has determined the following based on its review of the licensee proposal to omit this section of the SONGS 1 Technical Specifications from the PDTS. The current surveillance requirements applied to the control room emergency air treatment system are not necessary for either the safe operation or maintenance of SONGS 1 because the SONGS 1 reactor is permanently defueled and the protracted period of time available prior to requiring operator action, should the control room become uninhabitable. The removal of specifications no longer necessary for safe operation or maintenance of SONGS 1 is appropriate to reduce complexity of the SONGS 1 Technical Specifications. Therefore, the staff finds this proposed change acceptable.

4.12 Miscellaneous Radioactive Material Sources

The licensee proposes to retain this specification in its entirety in the PDTS as Specification D4.3.

4.13 Turbine Deck Load Bearing Test and Visual Inspection

This section of the SONGS 1 Technical Specifications was previously deleted from the SONGS 1 Technical Specifications by license Amendment No. 130, dated August 21, 1989.

4.14 Shock Suppressors (Snubbers) Surveillance

The purpose of this section of the SONGS 1 Technical Specifications is to ensure the operability of the safety-related snubbers.

The licensee proposes to omit from the PDTS the current surveillance requirements that apply to the plant safety-related snubbers. The licensee justification for not including this specification in the PDTS is that, none of the plant snubbers will be performing a safety-related function during the Permanently Defueled Mode.

The staff has determined the following based on its review of the licensee proposal to omit this specification from the PDTS. The current snubber technical specification is not necessary for either the safe operation or maintenance of SONGS 1 because the SONGS 1 reactor is permanently defueled. The removal of specifications no longer necessary for safe operation or maintenance of SONGS 1 is appropriate to reduce complexity of the SONGS 1 Technical Specifications. Therefore, the staff finds this proposed change acceptable.

4.15 Fire Protection

This section of the SONGS 1 Technical Specifications contains the following specifications to delineate the surveillance requirements for the plant Fire Protection Program: Specification 4.15.1, Fire Suppression Water System; Specification 4.15.2, Spray and/or Sprinkler Systems; Specification 4.15.3, Foam Suppression Systems; Specification 4.15.4, Halon System; Specification 4.15.5, Fire Hose Stations; Specification 4.15.6, Fire Detection Instrumentation; Specification 4.15.7, Fire Barriers; Specification 4.15.8, Dedicated and Alternative Shutdown Systems Surveillance; and Specifications 4.15.9, Eight Hour Emergency Lighting Units Surveillance.

The licensee proposed to omit these fire protection surveillance specifications from the PDTS. As previously addressed in Section III. A of this safety evaluation, the licensee proposed to omit Specifications 3.14.1 through 3.14.7 from the PDTS and incorporate these specifications into the SONGS 1 Fire Protection Program Procedures. The licensee also proposed to relocate the associated surveillance specifications 4.15.1 through 4.15.7 into the SONGS 1 Fire Protection Program Procedures. Also, previously addressed in Section 3.14 of this safety evaluation, the licensee proposed to omit Specifications 3.14.8 and 3.14.9 from the PDTS. The licensee justification for not including these specifications in the PDTS is that these specifications are no longer necessary to ensure the ability to shut down the

reactor in case of a fire since the reactor is permanently shut down and defueled. Therefore, the licensee also proposed to omit these associated surveillance requirements, Specifications 4.15.8 and 4.15.9, from the PDTS because they are also no longer necessary to ensure the ability to shut down the reactor.

The staff has determined the following based on its review of the licensee proposal to omit this section of the SONGS 1 Technical Specifications from the PDTS. The current fire protection surveillance technical specifications are not necessary for either the safe operation or maintenance of SONGS 1 because: (1) surveillance Specifications 4.15.1 through 4.15.7 are being incorporated into the SONGS 1 Fire Protection Program Procedures and deleted from the PDTS in accordance with NRC Generic Letters 86-10 and 88-12 (discussed above in Section 3.14 of this safety evaluation), and (2) surveillance Specifications 4.15.8 and 4.15.9 are no longer necessary to ensure the ability to shut down the SONGS 1 reactor since the reactor is permanently shut down and defueled. The removal of specifications no longer necessary for either the safe operation or maintenance of SONGS 1 is appropriate to reduce complexity of the SONGS 1 Technical Specifications. Therefore, the staff finds this proposed change acceptable.

4.16 Inservice Inspection of Steam Generator Tubing

The purpose of this section of the SONGS 1 Technical Specifications is to require the monitoring of the integrity of the steam generator tube primary boundary and provide guidance for corrective action when imperfections are observed.

The licensee proposes to omit the inservice inspection of steam generator tubing surveillance specification from the PDTS. The licensee justification for not including this specification in the PDTS is that the steam generators are permanently out of service.

The staff has determined the following based on its review of the licensee proposal to omit this section of the SONGS 1 Technical Specifications from the PDTS. The inservice inspection of steam generator tubing surveillance specification is not necessary for either the safe operation or maintenance of SONGS 1 because the SONGS 1 reactor is permanently shut down. The removal of specifications no longer necessary for safe operation or maintenance of SONGS 1 is appropriate to reduce complexity of the SONGS 1 Technical Specifications. Therefore, the staff finds this proposed change acceptable.

4.17 [Deleted]

This section of the SONGS 1 Technical Specifications was previously deleted from the SONGS 1 Technical Specifications by license Amendment No. 145, dated May 15, 1992.

4.18 [Deleted]

This section of the SONGS 1 Technical Specifications was previously deleted from the SONGS 1 Technical Specifications by license Amendment No. 145, dated May 15, 1992.

4.19 [Deleted]

This section of the SONGS 1 Technical Specifications was previously deleted from the SONGS 1 Technical Specifications by license Amendment No. 145, dated May 15, 1992.

4.20 Overpressure Protection System

The purpose of this section of the SONGS 1 Technical Specifications is to require surveillance of the overpressure protection system to ensure that this system will respond promptly and properly when required.

The licensee proposed to omit the overpressure protection system surveillance specification from the PDTs. The licensee justification for not including this surveillance specification in the PDTs is that the overpressure protection system will be removed from service during the permanently defueled mode as a result of the SONGS 1 reactor being permanently defueled. Thus, this specification is no longer necessary to ensure safe reactor operation.

The staff has determined the following based on its review of the licensee proposal to omit the overpressure protection system surveillance specification from the PDTs. The overpressure protection system surveillance specification is not necessary for either the safe operation or maintenance of SONGS 1 because the SONGS 1 reactor is permanently defueled. The removal of specifications no longer necessary for safe operation or maintenance of SONGS 1 is appropriate to reduce complexity of the SONGS 1 Technical Specifications. Therefore, the staff finds this proposed change acceptable.

5. Design Features

This section of the SONGS 1 Technical Specifications contains design features information of the facility, such as materials of construction and geometric arrangements, which, if altered or modified, would have a significant effect on safety. Section 5 of the SONGS 1 Technical Specifications contains design feature information related to the following areas: 5.1, Site Description; 5.2, Containment; 5.3, Reactor; and 5.4, Auxiliary Equipment.

The licensee proposes to make the following changes for Section D5, Design Features, of the proposed PDTs; (1) Section D5.1, Site Description, will be revised to reflect the presence of Units 2 and 3 at the San Onofre Nuclear Station site, (2) Section 5.1, Basis, will be omitted, because the information included in that section would be redundant to the proposed information in Section D5.1, (3) Sections 5.2 and 5.3 would be omitted from the PDTs, since

these sections no longer provide information about design features of SONGS 1 that is safety significant, due to the spent fuel being removed from both the reactor and containment and stored in the spent fuel pool, (4) Section 5.4 would be revised to provide a more complete description of the spent fuel storage facility, and (5) the title Section 5.4, Auxiliary Equipment, will be changed to Section D5.2, Spent Fuel Storage Facility.

The licensee justification for these changes is the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for these proposed changes. Further, the staff has determined, based on its review, that the proposed changes to Sections 5.1 and 5.4 and the deletion of Sections 5.2 and 5.3 are appropriate for a permanently defueled facility. Therefore, the staff finds these proposed changes acceptable.

6. Administrative Controls

This section of the SONGS 1 Technical Specifications contains administrative controls which are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner. This section will become Section D6, Administrative Control, in the proposed PDS.

In addition to editorial corrections, the licensee proposes to make the following changes to Section 6, Administrative Controls, of the current SONGS 1 Technical Specifications:

Subsection 6.1, Responsibility - This section will become Section D6.1 in the PDS. Also, the current subsections will be annotated with a "D" notation. Licensee proposed changes:

- (1) Specification 6.1.1, delete the words "design, construction, operation and maintenance of Unit 1 at San Onofre Nuclear Generating Station" and replace with "overall management of the plant and ensuring the safe storage and handling of irradiated fuel."

The licensee justification for this change is the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change, and finds this proposed change acceptable.

- (2) Specification 6.1.2, Foot Note *, to redefine the term "Control Room Area" from "control room and the Shift Superintendent's office" to "the area interior to the control room entry doors."

This new definition is consistent with the guidance of Regulatory Guide 1.114, "Guidance to Operators at Controls and to Senior Operators in the Control Room of A Nuclear Power Unit." Therefore, the staff finds this proposed change acceptable.

- (3) Addition of a new Specification D6.1.3, to allow the Certified Fuel Handler to take emergency actions, permitted by 10 CFR 50.54(x).

The NRC previously approved an exemption to the requirements of 10 CFR 50.54(x), dated June 25, 1993, granting this flexibility. Since this proposed change reflects the earlier findings of the staff, the staff finds this proposed change acceptable.

Subsection 6.2, Organization - This section will become Section D6.2 in the PDTs. Also, the current subsections will be annotated with a "D" notation. Licensee proposed changes:

- (1) Specification 6.2.1, (1) delete the words "unit operations" and replace with "plant management"; and (2) delete the words "safety of the nuclear power plant" and replace with "safe storage and handling of irradiated fuel."

The licensee justification for these changes is the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for these proposed changes, and finds these proposed changes acceptable.

- (2) Specification 6.2.1a, delete the words "operating organization positions" and replace with "organization positions involved with the safe storage and handling of irradiated fuel."

The licensee justification for this change is the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change, and finds this proposed change acceptable.

- (3) Specification 6.2.1b, (1) delete the words "safe operation" and replace with the word "safety"; and (2) delete the words "operation and maintenance of the plant" and replace with the words "storage and handling of irradiated fuel."

The licensee justification for these changes is the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for these proposed changes, and finds these proposed changes acceptable.

- (4) Specification 6.2.1c, (1) delete the words "Vice President, Nuclear Engineering, Safety, and Licensing and the Vice President and Site Manager" and replace with "Senior Vice President, and the Vice President and Site Manager, Nuclear Generation Site"; (2) add the words "Nuclear Generation Site"; (3) delete the words "operating and maintaining the plant to ensure nuclear safety" and replace with the words "the safe storage and handling of irradiated fuel"; (4) delete the words "Vice President, Nuclear Engineering, Safety, and Licensing" and replace with the words "Senior Vice President"; and (5) delete the words "nuclear safety" and replace with the words "the safe storage and handling of irradiated fuel."

The licensee justification for these changes is organizational responsibility changes and the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for these proposed changes, and finds these proposed changes acceptable.

- (5) Specification 6.2.2a, Table 6.2-1, Foot Note *, to redefine the term "Control Room Area" from "control room and the Shift Superintendent's office" to "the area interior to the control room entry doors."

This new definition is consistent with the guidance of Regulatory Guide 1.114, "Guidance to operators at Controls and to Senior Operators in the Control Room of A Nuclear Power Unit." Therefore, the staff finds this proposed change acceptable.

- (6) Specification 6.2.2b, (1) add the words, "unless Units 2 or 3 post-accident conditions allow only intermittent manning of the Control Room. The requirements for transfer of the Control Room Command Function contained in Specification D6.1.2 and Table D6.2-1 are not applicable if the Control Room is manned intermittently"; and (2) Foot Note ** redefine the term "Control Room Area" from "control room and the Shift Superintendent's office" to "the area interior to the control room entry doors."

The licensee justification for the intermittent manning of the SONGS 1 control room proposed change is that SONGS 1 can be maintained in a safe condition without continuous monitoring. The licensee states that once-a-day monitoring of SONGS 1 during potential Units 2 or 3 accident conditions is acceptable due to the long time period available to recover from any SONGS 1 equipment malfunctions. The operators could return to the SONGS 1 control room more frequently than once a day should conditions require closer attention. Further, the licensee is developing operating instructions and procedures for the evacuation of SONGS 1 control room and subsequent periodic monitoring. The licensee in its November 23, 1993 letter, committed to base these instructions and procedures on the following provisions:

1. The control room will be continuously manned unless operator safety is in jeopardy due to a severe hazard or accident.
2. Control room evacuation will be recommended by the emergency response team Health Physics Leader if radiological conditions could result in an operator dose rate exceeding emergency exposure levels specified by Emergency Plan Implementing Procedures for emergency response facilities. The operators may also evacuate the control room if necessary due to the effects of toxic gas, fire, smoke, or other significant hazards.
3. The plant status will be monitored at least once a day during periods of intermittent manning of Unit 1. The monitoring will include daily surveillance of the SFP water temperature and water level and weekly surveillance of the auxiliary feedwater storage tank water level. Means are available to perform the required surveillances locally if the control room were to remain uninhabitable or control room instrumentation was unavailable.
4. Corrective actions will be performed by the operators, as required, to ensure the safe storage of spent fuel in the SFP during periods of intermittent manning of Unit 1.

Further, the licensee committed to have the administrative control and the PDTs implemented concurrently.

The staff has determined that reasonable assurance will exist that SONGS 1 can be maintained in a safe condition with intermittent manning of the SONGS 1 control room during a serious accident at either of the operating units on the site based on the following: (1) The staff review of the November 23, 1993 licensee commitments, and (2) the long period of time available for operators to effect any recovery action, if necessary, at SONGS 1.

Further, this new definition is consistent with the guidance of Regulatory Guide 1.114, "Guidance to operators at Controls and to Senior Operators in the Control Room of A Nuclear Power Unit." Also, foot note ** will become foot note *.

Therefore, the staff agrees with the licensee basis for these proposed changes, and finds these proposed changes acceptable.

- (7) Specification 6.2.2c, (1) delete the word "reactor" and replace with the words "spent fuel pool"; and (2) add the words, "A health physics technician normally assigned to Units 2 and 3 may fulfill this function."

The licensee justification for these proposed changes is the permanently defueled status of the SONGS 1 which will entail far less generation and movement of radioactive material, and less personnel activity in radiologically restricted areas than would occur at an operating plant.

The staff agrees with the licensee basis for these proposed changes, and finds these proposed changes acceptable.

- (8) Specification 6.2.2e, delete this specification in its entirety.

The licensee justification for this proposed deletion of this fire brigade manning specification is that this change is part of the overall application of Generic Letters 86-10 and 88-12.

The staff, in Section III. A of this safety evaluation, concluded that the licensee has met the intent of Generic Letters 86-10 and 88-12. Therefore, the staff finds this proposed change acceptable.

- (9) Specification 6.2.2f, delete this specification in its entirety and replace with the proposed words "Administrative procedures shall be...guidelines is not authorized."

The licensee justification for this change is to be consistent with the Standard Technical Specifications and planned proposed changes to the Units 2 and 3 Technical Specifications.

The staff agrees with the licensee basis for this proposed change, and finds this proposed change acceptable.

Subsection 6.3, Unit Staff Qualifications - This section will become Section D6.3 in the PDTS. Also, the current subsection will be annotated with a "D" notation.

Subsection 6.4, Training - This section will become Section D6.4 in the PDTS. Also, the current subsections will be annotated with a "D" notation. Licensee proposed changes:

- (1) Specification 6.4.1, (1) delete the words "under the direction of the Manager, Nuclear Training"; (2) add the words "(except for retaining topics 1 and 2 in Section 5.5.1),"; and (3) add the words "Following initial NRC approval of the program, proposed changes to programs shall be submitted for NRC approval if required by 10 CFR 50.59."

The licensee justification for (1) deletion of specific manager responsibility for maintenance of the retraining and replacement training program is to allow latitude for future organizational changes; (2) exception ANSI N18.1-1971, Table 5.5.1, Retraining is that these Items 1 and 2 are related to conditions specific to an operating plant and SONGS 1 is permanently shut down; and (3) definition of method to be employed to modify the certified fuel handlers training program.

The staff, based on a review of the licensee justification for these proposed changes, finds: (1) the licensee failed to provide a sufficient basis to support deletion of the specific manager responsible for this training program. It is the position of the staff that the

responsibility of this program remain with a manager responsible for training and that the manager be at a certain level within the organization. Therefore, this proposed change is denied; (2) the staff agrees with the licensee basis for taking exception with ANSI N18.1-1971, of Table 5.5.1, Retraining, Item 1, Plant startup and shutdown procedures. However, the staff does not agree with the licensee justification for taking exception with ANSI N18.1-1971, of Table 5.5.1, Retraining, Item 2, Normal plant operating conditions and procedures. The position of the staff is that the licensee needs to include in its training program the procedures necessary for operation and maintenance of systems and components necessary to support the safe handling and storage of the spent fuel stored in the SONGS 1 spent fuel pool. Therefore, the staff finds acceptable only the proposed change related to the exception with ANSI N18.1-1971, of Table 5.5.1, Retraining, Item 1, Plant startup and shutdown procedures. The proposed change related to the exception with ANSI N18.1-1971, of Table 5.5.1, Retraining, Item 2, Normal plant operating conditions and procedures, is denied; (3) the staff agrees with the licensee basis of defining the method by which this program will be modified. Further, the staff agrees that the provisions of 10 CFR 50.59 may be used to modify this program, as long as the licensee maintains this program in accordance with the requirements of 10 CFR 50.120. Thus, the staff finds portions of this proposed change acceptable.

- (2) Specification 6.4.2, delete this specification in its entirety.

The licensee justification for this proposed deletion of this fire brigade manning training specification is that this change is part of the overall application of Generic Letters 86-10 and 88-12.

The staff, in Section III.A of this safety evaluation, concluded that the licensee has met the intent of Generic Letters 86-10 and 88-12. Therefore, the staff finds this proposed change acceptable.

Subsection 6.5, Review and Audit - This section will become Section D6.5 in the PDTs. Also, the current subsections will be annotated with a "D" notation. Licensee proposed changes:

- (1) Specification 6.5.1.2, delete the following members from the Onsite Review Committee: "Deputy Station Manager, Supervisor of I&C, Supervisor of Plant Chemistry, Supervising Engineer (NSSS Engineering, Power Generation, Computers, or STA)" and add one new member "Manager, Chemistry."

The licensee justification for these changes is the need to reflect the permanently shutdown condition of SONGS 1 and that the members to be removed from this committee have disciplines necessary to support an operating facility.

The staff agrees with the licensee basis for these proposed changes, and finds these proposed changes acceptable.

- (2) Specification 6.5.1.4, add the words "The Chairman may decrease the frequency of the OSRC meetings to a minimum of once per six months if warranted by a decrease in activity in the unit."

The licensee justification for this change is that following defueling and establishment of long-term storage conditions, the level of activity in the unit and the associated issues that need to be reviewed by this committee is expected to decrease significantly.

The staff agrees with the licensee basis for this proposed change, and finds this proposed change acceptable.

- (3) Specification 6.5.1.5, delete the words "one-half the remaining membership" and replace with "four members."

The licensee justification for this change is to be consistent with the requirements in the Units 2 and 3 Technical Specifications.

The staff agrees with the licensee basis for this proposed change, and finds this proposed change acceptable.

- (4) Specification 6.5.1.6c, delete the words "unit operations" and replace with "irradiated fuel storage and handling and radioactive waste operations."

The licensee justification for these changes is the need to reflect the permanently shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (5) Specification 6.5.1.6e, delete this specification in its entirety.

The licensee justification is that this specification addresses operation of reactor protection and engineered safety features devices in a bypass condition. Further, it is stated explicitly in this specification it is not applicable when the reactor is defueled.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (6) Specification 6.5.2.3, add in two locations, the words "required to be operational for the safe storage and handling of irradiated fuel."

The licensee justification for these changes is the need to reflect the permanently shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (7) Specification 6.5.2.6, delete the current Site Security Plan change procedure specification and replace with "The Site Security Plan, and implementation procedures shall be reviewed at least once per 12 months. Recommended changes to the Site Security Plan shall be approved by the Vice President and Site Manager, Nuclear Generation Site, and transmitted to the NSG Supervisor; implementing procedures shall be prepared and approved in accordance with Specification D6.8."

The licensee justification for this change is to be consistent with the requirements in the Units 2 and 3 Technical Specifications.

The staff agrees with the licensee basis for this proposed change, and finds this proposed change acceptable.

- (8) Specification 6.5.2.7, delete the current Site Emergency Plan change procedure specification and replace with "The Site Emergency Plan, and implementation procedures shall be reviewed at least once per 12 months. Recommended changes to the Site Emergency Plan shall be approved by the Vice President and Site Manager, Nuclear Generation Site, and transmitted to the NSG Supervisor; implementing procedures shall be prepared and approved in accordance with Specification D6.8."

The licensee justification for this change is to be consistent with the requirements in the Units 2 and 3 Technical Specifications.

The staff agrees with the licensee basis for this proposed change, and finds this proposed change acceptable.

- (9) Specification 6.5.2.10, add the words "in accordance with Specification D6.10."

The licensee justification for this change is to be consistent with the requirements in the Units 2 and 3 Technical Specifications.

The staff agrees with the licensee basis for this proposed change, and finds this proposed change acceptable.

- (10) Specification 6.5.3.1a, delete the function "nuclear plant operations" from the Nuclear Safety Group.

The licensee justification for these changes is the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed changes and finds this proposed change acceptable.

- (11) Specification 6.5.3.4d, delete the word "Operating" and replace with "Possession Only."

The licensee considered this proposed change to be an editorial correction to reflect the NRC issuance of license Amendment No. 150, dated October 23, 1992. This license amendment removed the authority of the licensee to operate SONGS 1 upon completion of the final defueling. Thus, the licensee is allowed to possess but not operate SONGS 1. However, Facility Operating License No. DRP-13 is still defined as an operating license under the provisions of 10 CFR Part 50. Therefore, the staff will not accept this change as proposed, but will accept the insertion of "(Possession Only)" after the word "Operating."

- (12) Specification 6.5.3.4f, delete this specification in its entirety.

The licensee justification is that this specification addresses operation of reactor protection and engineered safety features devices in a bypass condition. Further, it is stated explicitly in this specification it is not applicable when the reactor is defueled.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (13) Specification 6.5.3.4h, delete the words "could affect nuclear safety" and replace with "are required to be operational for the safe storage and handling of irradiated fuel."

The licensee justification for this change is the need to reflect the permanently shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (14) Specification 6.5.3.5a, delete the words "unit operation" and replace with "irradiated fuel storage and handling operations."

The licensee justification for this change is the need to reflect the permanently shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (15) Specification 6.5.3.5c, (1) delete the words "unit equipment," and replace with "safety related"; and (2) delete the words "method of operation."

The licensee justification for this change is the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (16) Specification 6.5.3.5e, delete the words "of unit operation."

The licensee justification for this change is the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

Subsection 6.6, Review and Audit - This section will become Section D6.6 in the PDTS. Also, the current subsection will be annotated with a "D" notation.

Subsection 6.7, Safety Limit Violation - This section will become Section D6.7 in the PDTS. The current subsections will be annotated with a "D" notation. Also the licensee proposes to delete Specification 6.7.1d, in its entirety. The licensee justification for this proposed change is that the specification is specifically directed to power operation and operation of SONGS 1 is prohibited. The staff agrees with the licensee basis for this proposed change, and finds this proposed change acceptable.

Subsection 6.8, Procedures and Programs - This section will become Section D6.8 in the PDTS. Also, the current subsections will be annotated with a "D" notation. Licensee proposed changes:

- (1) Specification 6.8.1, delete footnote * in its entirety.

The licensee justification for this change is to be consistent with the requirements in the Units 2 and 3 Technical Specifications.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (2) Specification 6.8.1b, delete the word "Refueling" and replace with "Fuel Handling."

The licensee justification for this change is the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (3) Specification 6.8.1c, add the words "required to be operational for the safe storage and handling of irradiated fuel."

The licensee justification for this change is the need to reflect the permanently shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (4) Specification 6.8.4a, delete this specification in its entirety.

The licensee justification is that the objective of this specification is to minimize the release of fission products from the containment following an accident. Since the reactor is permanently defueled, this pathway is no longer credible.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (5) Specification 6.8.4b, delete this specification in its entirety.

The licensee justification is that the objective of this specification is to maintain a monitoring program for airborne iodine, which has a short half-life (approximately eight days), in vital areas following an accident. Since the reactor is permanently defueled, this monitoring program is no longer necessary.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (6) Specification 6.8.4c, delete this specification in its entirety.

The licensee justification is that the objective of this specification is to provide procedures and training for operators to monitor reactor coolant system subcooling. Since the reactor is permanently defueled, this training is no longer necessary.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (7) Specification 6.8.4d, delete this specification in its entirety.

The licensee justification is that the objective of this specification is to provide the mechanisms for controlling secondary water chemistry to inhibit steam generator tube degradation. Since the reactor is permanently defueled, this program is no longer necessary.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (8) Specification 6.8.4e, delete this specification in its entirety.

The licensee justification is that the objective of this specification is post-accident sampling of the reactor coolant, plant gaseous effluent, and the containment atmosphere. Since the reactor is permanently defueled, this sampling ability is no longer necessary.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (9) Specification 6.8.4f(6), delete the words "and gaseous."

The licensee justification is that the gaseous effluent treatment system will no longer be necessary since the reactor is permanently defueled.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

Subsection 6.9, Reporting Requirements - This section will become Section D6.9 in the PDTs. Also, the current subsections will be annotated with a "D" notation. Licensee proposed changes:

- (1) Specification 6.9.1, delete the words "NRC Regional Administrator" and replace with "U. S. Nuclear Regulatory Commission, Attention: Document Control Desk, Washington, D.C., with the Regional Administrator of the Regional Office of the NRC."

The licensee justification for this proposed change is for conformance with 10 CFR 50.4.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (2) Specification 6.9.1.1, delete this specification in its entirety.

The licensee justification for this proposed change is that this specification is related to startup reports and since the reactor is permanently defueled, startup reports are no longer necessary.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (3) Specification 6.9.1.2, delete this specification in its entirety.

The licensee justification for this proposed change is that this specification is related to startup reports and since the reactor is permanently defueled, startup reports are no longer necessary.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (4) Specification 6.9.1.3, delete this specification in its entirety.

The licensee justification for this proposed change is that this specification is related to startup reports and since the reactor is permanently defueled, startup reports are no longer necessary.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (5) Specification 6.9.1.5, (1) delete the word "reactor"; (2) delete the word "refueling" and replace with "fuel handling"; and (3) delete the words "Report required on annual basis...of the primary coolant exceeded the radioiodine limit."

The licensee justification for these changes is the need to reflect the permanently shutdown condition of SONGS 1.

The staff agrees with the licensee basis for these proposed changes and finds these proposed changes acceptable.

- (6) Specification 6.9.1.6, delete the words "the operation of the unit."

The licensee justification for this change is the need to reflect the permanently shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (7) Specification 6.9.1.8, "the operation of the unit during" was omitted prior to the wording "the previous calendar year" to reflect the permanently shutdown status of the plant. The specification was also changed to clearly indicate that only the waste volume arriving at the disposal site need be reported, even if there is an intermediate offsite volume reduction prior to final disposal.

The licensee justification for this proposed change is to document the currently accepted practice and to be consistent with the practices of Units 2 and 3, and planned proposed changes to the Units 2 and 3 Technical Specifications.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (8) Specification 6.9.1.10, delete this specification in its entirety.

The licensee justification for this proposed change is that this specification is related to monthly operating reports and since the reactor is permanently defueled, monthly operating reports are no longer necessary.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (9) Specification 6.9.2, delete the words "Nuclear Regulatory Commission" and replace with "U.S. Nuclear Regulatory Commission, Attention: Document Control Desk, Washington, DC, with the Regional Administrator of the Regional Office of the NRC."

The licensee justification for this proposed change is for conformance with 10 CFR 50.4.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

Subsection 6.10, Record Retention - This section will become Section D6.10 in the PDTS. Also, the current subsections will be annotated with a "D" notation. Licensee proposed changes:

- (1) Specification 6.10.1a, add the words "until the unit was permanently shut down,."

The licensee justification for this change is the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (2) Specification 6.10.1g, (1) add the words "and fission detector"; and (2) delete the words ", in units of microcuries, for leak tests performed pursuant to Specification 4.12."

The licensee justification for these changes is to be consistent with the requirements in the Units 2 and 3 Technical Specifications.

The staff agrees with the licensee basis for these proposed changes and finds these proposed changes acceptable.

- (3) Add a new Specification D6.10.1i, this section is to provide record retention requirements for the defueled condition. The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.
- (4) Specification 6.10.2, delete the words "Operating" and replace with "Possession Only." The staff is denying this proposed change for the same reason provided above in the discussion on Specification 6.5.3.4d. However, the staff will accept the insertion of the following "(Possession Only)" after the word "Operating."

- (5) Specification 6.10.2f, the addition of a footnote to assure that certain types of existing records are retained even though no new records are expected. The staff agrees with the licensee basis for this proposed changes and finds this proposed change acceptable.
- (6) Specification 6.10.2h, the addition of a footnote to assure that certain types of existing records are retained even though no new records are expected. The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.
- (7) Specification 6.10.2i, the addition of a footnote to assure that certain types of existing records are retained even though no new records are expected. The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.
- (8) Specification 6.10.2m, the addition of a footnote to assure that certain types of existing records are retained even though no new records are expected. The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

Subsection 6.11, Radiation Protection Program - This section will become Section D6.11 in the PDTS.

Subsection 6.12, High Radiation Area - This section will become Section D6.12 in the PDTS. Also, the current subsections will be annotated with a "D" notation. In Specification 6.12.2, the licensee proposed to delete the word "Superintendent" and replace with "Supervisor." The licensee justification for this proposed change is organizational responsibility change at SONGS 1. The staff agrees with the licensee basis for this proposed change, and finds this proposed change acceptable.

Subsection 6.13, Process Control Program - This section will become Section D6.13 in the PDTS.

Subsection 6.14, Offsite Dose Calculation Manual - This section will become Section D6.14 in the PDTS.

Subsection 6.15, [Deleted],

This section of the SONGS 1 Technical Specifications was previously deleted from the SONGS 1 Technical Specifications by license Amendment No. 145, dated May 15, 1992.

Subsection 6.16, Environmental Protection - This section will become Section D6.15 in the PDTS. Also, the current subsections will be annotated with a "D" notation. Licensee proposed changes:

- (1) Specification D6.15.1, includes text to explain the status of the circulating water system in the Permanently Defueled Mode, since the previous description was based on continuous system operation to remove waste heat during power operations. Following permanent plant shutdown

and defueling, operation of the circulating water system may continued during the draining of various plant systems to facilitate compliance with the ODCM. Upon completion of systems dewatering, no further operation of the circulating water system is anticipated. The licensee has proposed changes to reflect the changed requirements to be imposed on the circulating water system.

The licensee justification for this addition was to clarify the operation of this system during the permanently defueled condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (2) Specification D6.15.1a (6.16.1a), which describes the circulating water intake system, (1) delete the word "Cooling"; (2) delete the words "The circulating water system...screens, and chlorination."; (3) delete the words "Heat treatments used...and be flushed out of the system."; and (4) delete the words "For chlorination, sufficient...on condenser internal surfaces."

The licensee justification for these proposed changes is the need to reflect the maintenance and operation of the circulating water system during permanent shutdown of SONGS 1.

The staff agrees with the licensee basis for these proposed changes and finds these proposed changes acceptable.

- (3) Specification D6.15.1b (6.16.1b), which describes the circulating water discharge system, (1) delete the words "Under normal operating conditions, the heated cooling"; (2) delete the word "cooler"; (3) delete the word "diminution" and replace with "diffusion"; and (4) delete the word "temperature" and replace with "water."

The licensee justification for these proposed changes is the need to reflect the operation of this system during permanent shutdown of SONGS 1.

The staff agrees with the licensee basis for these proposed changes and finds these proposed changes acceptable.

- (4) Specification 6.16.1c, delete this specification in its entirety.

The licensee justification for this proposed change to land management is that this specification is site specific rather than Unit 1 specific, and this requirement is captured in the Technical Specifications for Units 2 and 3.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

- (5) Specification 6.16.2b, replace the term "station operation" with "station activities."

The licensee justification for these changes is the need to reflect the permanent shutdown condition of SONGS 1.

The staff agrees with the licensee basis for this proposed change and finds this proposed change acceptable.

IV. STATE CONSULTATION

In accordance with the Commission regulations, the California State official was notified of the proposed issuance of the amendment. The State official had no comments.

V. ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and/or changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (58 FR 34093) on June 23, 1993, and (58 FR 36445) on July 7, 1993. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

VI. CONCLUSION

The staff concludes that the SONGS 1 PDTS delineate the lowest functional capability or performance level of equipment required for the safe operation of the facility, and meet the intent of 10 CFR 50.36 and 72.44(c). Therefore, the staff concludes that the PDTS are acceptable and should be used in lieu of the SONGS 1 Appendix A Technical Specifications.

The staff has also concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Stewart Brown

Date: December 28, 1993